

IAP6 Rec'd PCT/PTO 03 MAR 2006

SEQUENCES

SEQ ID No:1 (Aph-1a)

MGA AVFFGCTFVAFGPAFALFLITVAGDPLRVILVAGAFFWLVSLLLASVWVWIL
5 VHVTD RSDARLQYGLLIFGA AVSVLLQEVFRFAYYKLLKKADEGLASLS SEDGRSPI
SIRQMA YVVSGLSFGIISGVFSVINILADALGPGVVG IHGDS PYYFLTSAFLTAA IILLH
TFWGV VFFD ACERRRYWALGLVVGSHLLTSGLTFLNPWYEASLLPIYAVTVSMGL
WAFITAGGSLRSIQRSLLCRRQEDSRVMVYSALRIPPED

10 SEQ ID No: 2 (JUP)

EVMNLMEQPIKVTEWQQTYTYDSGIHSGANTCVPSVSSKGIMEEDEACGRQYTLK
KTTTYTQGVPPSQGDLEYQMSTTARAKRVREAMCPGVS GEGQLALLATQVEGQA
TNLQRLAEP SQLLKS AIVHLINYQDDAELVTRALPELTKLLNDEDPVVVTKAAMIV
NQLSKKEASRRALMGSPQLVAAVVRTMQNTSDLD TARCTTSILHNL SHHREGLLA
15 IFKSGGIPALVRMLSSPVESVLFYAITTLHNL LLYQEGAKMACAGRAQKMVPLL
NKNNPKFLAITTDCLQLLAYGNQESKLIILANGGPQALVQIMRNYSYEKLLWTTSR
VLKVL SVCPSNKP AIVEAGGMQALGKHLTSNSPRLVQNCLWTLRNLSDVATKQE
GLESVLKILVNQLSVDDVNVLT CATGTLSNLTCNNSKNKTLVTQNSGVEALIHAIL
RAGDKDDITEPAVCALRHLSRHPEAEMAQNSVRLNYGIPAIVKLLNQPNQWPLV
20 KATIGLIRNLALCPANHAPLQEAAVIPRLVQLLVKAHQDAQRHVAAGTQQPYTDG
VRMEEIVEGCTGALHILARDPMNRMEIFRLNTIPLFVQLLYSSVENIQRVAAGVLC
ELAQDKEAADAIDAEGASAPLMELLHSRNEG TATYAAAVLFRISEDKNPDYRKR
SVELTNSL FKHDPA AWEAAQSMIPINEPYGDDMDATYRPMYSSDVPLDPLEMHM
DMDGDYPIDTYS DGLRPPYPTADHMLA

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SEQ ID No: 3 (Psen1)

MTELPAPLSYFQNAQMSEDNHLSNTVRSQNDNRERQEHNDRRSLGHPEPLSNGRP
QGNSRQVVEQDEEED EELTKYGA KHVIML FVPVTL CMVVV VVATIKSVSFYTRKD
GQLIYTPFTEDTETVGQRALHSILNAAIMISVTVVMTILLV VLYKYRCYKVIHAWLII
30 SSLLLLFFFSFIYLGEVFKTYNVAVDYITVALLIWNFGVVGMISIH WKGPLRLQQAY
LIMISALMALVFIKYLPEWTAWLILAVISVYDLVAVLC PKGPLRMLVETAQERNET
LFPALIYSSTMVWL VNMAEGDPEAQR RVSKNSKYNAESTERESQDTVAENDDGG

FSEEWEAQRDShLGPHRSTPESRAAVQELSSSILAGEDPEERGVKLGLGDFIFYSVL
VGKASATASGDWNTTIACFVAILIGLCLTLLLLAIFKKALPALPISITFGLVIFYATD
YLVQPFMDQLAFHQFYI

5 SEQ ID No: 4 (ACAT1)

MVGEEKMSLRNRLSKSRENPEEDEDQRNPAKESLETSPNGRIDIKQLIAKKIKLTAE
AEARLKPFFMKEVGSHFDDFVTNLIEKSASLDNGGCALTTFVLEGEKNNHRAKD
LRAPPEQGKIFIARRSLLDELLEVDHIRTYYHMFIALLLFILSTLVVDYIDEGRLVLE
FSLLSYAFGKFPTVWWTWWIMFLSTFSVPYFLFQHWATGYSSSHPLIRSLFHGFL
10 FMIFQIGVLGFGPTYVVLA YTLPPASRFIIIEQIRFVMKAHSFVRENVPRVLNSAKE
KSSTVPIPTVNQYLYFLFAPTLYRDSYPRNPTVRWGYVAMKFAQVFGCFYVYYI
FERLCAPLFRNIKQEPFSARVLVLCVFNSILPGVLILFLTFFAFLHCWLNAFAEMLRF
GDRMFYKDWWNSTSYSNYYRTWNVVDWLYYYAYKDFLWFFSKRFKSAAM
LAVFAVSAVVHEYALAVCLSFFYPVLFLVFMFFGMAFNFTVNDNRKKPIWNVLM
15 WTSFLGNGVLLCFYSQEWYARQHCPLKNPTFLDYVRPRSWTCRYVF

SEQ ID No: 5 (BRI)

MVKVTFNSALAQKEAKKDEPKSGEEALIPPDAAVAVDCKDPDDVVPVGQRRWC
WCMCFGLAFMLAGVILGGAYLYKYFALQPDDVYYCGIKYKDDVILNEPSADAPA
20 ALYQTIEENIKIFEEEEVEFISVPVPEFADSDPANIVHDFNKKLTAYLDLNLDKCYVI
PLNTSIVMPPRNLELLINIKAGTYLPQSYLIHEHMVITDRIENIDHLGFFIYRLCHDK
ETYKLQRRETIKGIQKREASNCFAIRHFENKFAVETLICS

SEQ ID No: 6 (calsyntenin 1)

MLRRPAPALAPAARLLLAGLLCGGGVWAARVNKHKPWLEPTYHGIVTENDNTVL
LDPPLIALDKDAPLRFAGEICGFKIHGQNVPFDAVVVDKSTGEGVIRSKEKLDCEL
QKDYSFTIQAYDCGKGPDTGNVKKSHKATVHIQVNDVNEYAPVFKEKSYKATVIE
GKQYDSILRVEAVDADCSPQFSQICSYEITPDVPFTVDKDG YIKNTEKLN YGKEHQ
YKLTVTAYDCGKKRATEDVLVKISIKPTCTPGWQGWNNRIEYEPGTGALAVFPNI
30 HLETCDEPVASVQATVELETSHIGKGC DRD TYSEKSLHRLCGAAAGTAELLPSPSG
SLNWTMGLPTDNGHDS DQVFEFNGTQAVRIPDGVVSVSPKEPFTISVWMRHGPFG
RKKETILCSSDKTDMNRHHYSLYVHGCRLIFLFRQDPSEEKKYRPAEFHWKLNQV

CDEEWHHYVLNVEFPSVTLYADGTSHEPFSVTEDYPLHPSKIETQLVVGACWQEF
SGVENDNETEPVTVACAGGDLHMTQFFRGNLAGLTLRSGKLADKKVIDCLYTCK
EGLDLQVLEDSGRGVQIQAHRSQVLTLLEGEDLGELDKAMQHISYLSNRQFPTPGI
RRLKITSTIKCFNEATCISVPPVDGYVMVLQPEEPKISLSGVHHFARAASEFESSEGV
5 FLFPELRIISTITREVEPEGDGAEDPTVQESLVSEEIVHDLDTC EVTVEGEELNHEQE
SLEVDMARLQQKGIEVSSSELGMTFTGVDTMASYEEVLHLLRYRNWHARSLDDR
KFKLICSELNGR YISNEFKVEVNVHTANPMEHANHMAAQPQFVHPEHRSFVDLS
GHNLANPHPFVAVHSTATVIVVVCVSSLVFMILGVFRIRAAHRRRTMRDQDTGKE
NEMDWDDSAITITVNPMETYEDQHSSEEEEEEEEEEESEDGEEEDDITSAESESSEE
10 EEQEQQDPQNA TRQQQLEWDDSTLSY

SEQ ID No: 7 (DLK1)

MTATEALLRVLLLLLAFGHSTYGAECFPACNPQNGFCEDDNVCRCQPGWQGPLIC
DQCVTSPGCLHGLCGEPGQCICTDGWDGELCDRDVRACSSAPCANNGTCVSLDG
15 GLYECSCAPGYSGKDCQKKDGPCVINGSPCQHGGTCVDDEGRASHASCLCPPGFS
GNFCEIVANSCTPNPCENDGVCTDIGGDFRCRCPAGFIDKTC SRPVTNCASSPCQN
GGTCLQHTQGQAICFTILGVLTSVLVLTGVIVFLNKCETWVSNLRYNHMLRKKK
NLLLQYNSGEDLAVNIIFPEKIDMTTFSKEAGDEEI

20 SEQ ID No: 8 (DSCD75)

MLGLLVALLALGLAVFALLDVWYLVRLPCAVLRARLLQPRVRDLLAEQRFPGRV
LPSDLDLLLHMNNARYLREADFARVAHLTRCGVLGALRELRAHTVLAASCARHR
RSLRLLEPFVTRLLGWDDRAFYLEARFVSLRDGFVCALLRFRQHLLGTSPERVV
QHLCQRRVEPEL PADLQHWISYNEASSQLLRMESGLSDVTKDQ

25

SEQ ID No:9 (Nicastrin)

MATAGGGSGADPGSRGLLRLLSFCVLLAGLCRGNSVERKIYIPLNKTAPCVRLINA
THQIGCQSSISGDTGVIVHVEKEEDLQWVLTGPNPPYMVLLSKHFTDLMEKL
KGRTSRIAGLAVSLTKPSPASGFSPSVQCPNDGFGVYSNSYGPEFAHCREIQWNSL
30 GNGLAYEDFSFPIFLEDENETKVIKQCYQDHNLSQNGSAPTFLCAMQLFSHMHA
VISTATCMRRSSIQSTFSINPEIVCDPLSDYNVWSMLKPINTTGTLKPDDR VVVAAT
RLDSRSFFWNVAPGAESA VASFVTQLAAAEALQKAPDVTTLPRNVMFVFFQGETF

DYIGSSRMVYDMEKGKFPVQLENVDSFVELGQVALRTSLELWMHTDPVSQKNES
VRNQVEDLLATLEKSGAGVPAVILRRPNQSQPLPPSSLQRFLRARNISGVVLADHS
GAFHNKYYQSIYDTAENINVSYPEWLSPEEDLNFTVDTAKALADVATVLGRALYE
LAGGTNFSDTVQADPQTVTRLLYGFLIKANNSWFQSILRQDLRSYLGDGPLQHYIA
5 VSSPTNTTYVVQYALANLTGTVVNLTREQCQDPSKVPSENKDLYEYSWVQGPLHS
NETDRLPRCVRSTARLARALSPAFELSQWSSTEYSTWTESRWKDIRARIFLIASKEL
ELITLTVGFGILIFSLIVTYCINAKADVLFAPREPGAVSY

SEQ ID No:10 (Pen-2)

10 MNLERVSNEEKLNLCKRYYLGGFAFLPFLWLVNIFWFFREAFVPAYTEQSQIKG
YVWRSVAVGFLFWVIVLTSWITIFQIYRPRWGALGDYLSFTIPLGTP

SEQ ID No: 11 (FACL3)

MNNHVSSKPSTMKLKHTINPILLYFIHFLISLYTILTYIPFYFFSESREQESNRIKAKP
15 VNSKPDSAYRSVNSLDGLASVLYPGCDTLDKVFTYAKNKFKNKRLLGTTREVLNEE
DEVQPNGKIFKKVILGQYNWLSYEDVFVRAFNFGNGLQMLGQKPKTNIAIFCETR
AEWMIAAQACFMYNFQLVTLYATLGGAIVHALNETEVTNITSKELLQTKLKDIV
SLVPRLRHIITVDGKPPTWSDFPKGIVHTMAAVEALGAKASMENQPHSKPLPSDIA
VIMYTSGSTGLPKGVMISHSNIAGITGMAERIPELGEEDVYIGYLPLAHVLELSAEL
20 VCLSHGCRIGYSSPQTLADQSSKIKKGSKGDTSMKPTLMAAVPEIMDRIYKNVM
NKVSEMSSFQRNLFILAYNYKMEQISKGRNTPLCDSFVFRKVRSLLGGNIRLLLCG
GAPLSATTQRFMNICFCCPVGGQGYGLTESAGAGTISEVWDYNTGRVGAPLVCCEI
KLKNWEEGGYFNTDKPHPRGEILIGGQSVTMGYKNEAKTKADFSEDENGQRWL
CTGDIGEFEPDGCLKIIDRKKDLVKLQAGEYVSLGKVEAALKNLPLVDNICAYANS
25 YHSYVIGFVVPNQKELTELARKKGLKGTWEELCNSCEMENEVLKVLSEAAISASL
EKFEIPVKIRLSPEPWTPETGLVTDAFKLKRKELKTHYQADIERMYGRK

SEQ ID No: 12 (FLJ10579)

MSRLGALGGARAGLGLLLGTAAGLGFLCLLYSQRWKRTQRHGRSQSLPNSLDYT
30 QTSDPGRHVMLLRAVPGGAGDASVLPSPREGQEKVLDRLDFVLTSVALRREVE
ELRSSLRGLAGEIVGEVRCHMEENQRRVARRRRFPFVRERSDSTGSSSVYFTASSGA
TFTDAESEGGYTTANAESDNERDSDKESEDGEDEVSCETVKMGRKDSLDLEEEAA

SGASSALEAGGSSGLEDVLP LLQQADELHRGDEQGKREGFQ LLLNNKL VYGSRQD
FLWRLARAYSDMCELTEEVSEKKSYALDGKEEAEEAALEKGDSEADCHLWYAVLC
GQLAEHESIQRRIQSGFSFKEHVDKAIALQPENPMAHFLLGRWCYQVSHLSWLEK
KTATALLESPLSATVEDALQSFLKAEELQPGFSKAGRVIYISKCYRELGKNSEARW
5 WMKLALLELPDVTKEDLAIQKDLEEELEVILRD

SEQ ID No: 13 (ITM2C)

MVKISFQPAVAGIKGDKADKASASAPAPASATEILLTPAREEQPPQHRSKRGGSVG
GVCYLSMGMVVLLMGLVFASVYTYRYFFLAQLARDNFFRCGVLYEDSLSSQVRT
10 QMELEEDVKIYLDENYERINVPVPQFGGGDPADIIHDFQRGLTAYHDISLDKCYVIE
LNTTIVLPPRNFWE LLMNVKRGTYLPQTYIIQEEMVVTEHVSDKEALGSFTYHLCN
GKDTYRLRRRATR RRINKRGAKNCNAIRHFENTFVVETLICGVV

SEQ ID No:14 (Presenilin)

15 MTELPAPLSYFQNAQMS EDNHLSTNDNRERQEHNDRRSLGHPEPLSNGRPQGNS
RQVVEQDEEEDEELTKYGA KHVIMLFVPVTLCMVVVVATIKSVSFYTRKDGQLI
YTPFTEDTETVGQRALHSILNAAIMISVIVVMTILLVVLKYRCYKVIHAWLISSLL
LLFFFSFIYLG EVFKTYNVAVDYITVALLIWN LGVVGMI SHWKGPLRLQQA YLIMI
SALMALVFIKYLPEWTAWLILAVISVYDLVAVLCPKGPLRMLVETAQERNETLFP
20 ALIYSSTMVWLVNMAEGDPEAQRRVSKNSKYNAESTERESQDTVAENDDGGFSE
EWEAQRD SHLGPHRSTPESRAAVQELSSSILAGEDPEERG VKLGLGDFIFYSVLVG
KASATASGDWNTTIACFVAILIGLCLTLLLLAIFKKALPALPISITFGLVFYFATDYL
VQPFMDQLAFHQFYI

25 SEQ ID No:15 (Sortilin/Sort1)

MERPWGAADGLSRWPHGLGLLLLLQLLPPSTLSQDRLDAPPPPAAPLPRWSGPIGV
SWGLRAAAAGGAFPRGGRWRRSAPGEDEECGRVRDFVAKLANNTHQHVFDDL R
GSVSLSWVG DSTGVILVLTTFHVPLVIMTFGQSKLYRSEDY GKNFKDITDLINNTFI
RTEFGMAIGPENSGKVVLTAEVSGGSRGGRIFRSSDFAKNFVQTDLPFHPLTQMM
30 YSPQNSDYLLALSTENGLWVSKNFGGKWEEIHKAVCLAKWGS DNTIFFTTYANGS
CKADLGALELWRTSDLGKSFKTIGVKIYSFGLGGRFLFASVMADKDTTRRIHVSTD
QGDTWSMAQLPSVGGQE QFYSSILAANDDMVFMHVDEPGDTGFGTIFTSDDRGIVYS

KSLDRHLYTTTGGETDFTNVTSLRGVYITSVLSEDNSIQTMITFDQGGRWTHLRKP
ENSECDATAKNKNECSLHHASYSISQKLNVPMAPLSEPNAVGVIAHGSVGDASV
MVPDVYISDDGGYSWTKMLEGPHYTYTILDSGGIIVAIEHSSRPINVIKFSTDEGQCW
QTYTFTRDPIYFTGLASEPGARSMNISIWGFTESFLTSQWVSYTIDFKDILERNCEEK
5 DYTIWLAHSTDPEDYEDGCILGYKEQFLRLRKSSMCQNGRDYVVTKQPSICLCSLE
DFLCDFGYRPENDSKCVEQPELKGHDLFCLYGREEHLTTNGYRKIPGDKCQGG
VNPVREVKDLKKKCTSNFLSPEKQNSKSNVPIILAIVGLMLVTVVAGVLIVKKYV
CGGRFLVHRYSVLQQHAEANGVDGVDALDTASHTNKSGYHDDSDLEDLLE

10 SEQ ID No: 16 (ITPR1)

MSDKMSSFLHIGDICSLYAEGSTNGFISTLGLVDDRCVVQPETGDLNNPPKKFRDC
LFKLCPMNRYS AQKQFWKAAKPGANSTTDAVLLNKLHHAADLEKKQNETENRK
LLGTVIQYGNVIQLLHLKSNKYLTVNKRLPALLEKNAMRVTLDEAGNEGSWFIQ
PFYKLRSIGDSVVIGDKVVLNPNVAGQPLHASSHQLVDNPGCNEVNSVNCNTSWK
15 IVLFMKWSDNKDDILKGGDVVRLFHAEQEKFLTCDEHRKKQHVFRLRTTGRQSATS
ATSSKALWEVEVVQHDPCRGGAGYWNSLFRFKHLATGHYLA AEVDPDFEEECLE
FQPSVDPDQDASRSRLRNAQEKMVYSLVS VPEGNDISSIFELDPTTLRGGDSL VPR
NSYVRLRHLCTNTWVHSTNIPIDKEEEKPVMLKIGTSPVKEDKEAFAIVPVSPA EV
RDLD FANDASKVLGSIAGKLEKGTITQNERRSVTKLLEDLVYFVTGGTNSGQDVL
20 EVVFSKPNRERQKLMREQNILKQIFKLLQAPFTDCGDGPMLRLEELGDQRHAPFR
HICRLCYRVL RHSQQDYRKNQEYIAKQFGFMQKQIGYDVLAEDTITALLHNNRKL
LEKHITAAEIDTFVSLVRKNREPRFLDYLS DLCVSMNKSIPVTQELICKAVLNPTNA
DILIETKLVLSRFEFEGVSSTGENALEAGEDEEEVWLFWRDSNKEIRSKSVRELAQD
AKEGQKEDRDVLSYYRYQLNLFARMCLDRQYLAIN EISGQLDVDLILRCMSDENL
25 PYDLRASFCRLMLHMHVDRDPQE QVTPVKYARLWSEIPSEIAIDDYDSSGASKDEI
KERFAQTMEFVEEYLRDVVCQRFPFSDKEKNKLTFEVVNLARNLIYFGFYNFSDLL
RLTKILLAILDCVHVTTIFPISKMAKGEENKGNNDVEK LKSSNVMRSIHGVGELMT
QVVLRGGGFLPMTPMAA APEGNVKQAEPEKEDIMVMDTKLKIEILQFILNVRLDY
RISCLLCIFKREFDESNSQTSETSSGNSSQEGPSNVP GALDFEHIEEQAEGIFGGRKV
30 YFHEENTPLDLDHGGRTFLRVLLH LTMHDY PPLVSGALQLLFRHFSQRQEVLQA
FKQVQLLVTSQDVDNYKQIKQDLDQLRSIVEKSELWVYKGQGPDETMDGASGEN
EHKKTEEGNNKPKQKHESTSSYNYRVVKEILIRLSKLCVQESASVRKSRKQQQRLLR

NMGAHAVVLELLQIPYEKAEDTKMQEIMRLAHEFLQNFCAGNQQNQALLHKHIN
LFLNPGILEAVTMQHIFMNNFQLCSEINERVVQHFVHCIETHGRNVQYIKFLQTIVK
AEGKFIKKCQDMVMAELVNSGEDVLVIFYNDRASQTLIQMMRSEDRMDENSPL
MYHIHLVELLAVCTEGKNVYTEIKCNSLLPLDDIVRVVTHEDCIPEVKIAYINFLNH
5 CYVDTEVEMKEIYTSNHMWKLFENFLVDICRACNNTSDRKHADSSILEKYVTEIVM
SIVTTFFSSPFSQSTTLQTRQPVFVQLLQGVFRVYHCNWLMPSSQKASVESCIRVLS
DVAKSRAIAIPVDLDSQVNNLFLKSHSIVQKTAMNWRLSARNAARRDSVLAASRD
YRNIIERLQDIVSALEDRLRPLVQAELSVLVDVLHRPELLFPENTDARRKCESGGFI
CKLIKHTKQLLEENEEKLCIKVLQTLREMMTKDRGYGEKLISIDELDNAELPPAPD
10 SENATEELEPSPLRQLEDHKRGEALRQVLVNRYYGNVRPSGRRESLTSFGNGPLS
AGGPGKPGGGGGGGSGSSMSRGEMLAEVQCHLDKEGASNLVIDLIMNASSDRVF
HESILLAIALLGGNTTIQHSFFCRLTEDKKSEKFFKVIFYDRMKVAQQEIKATVTVN
TSDLGNKKKDDEVDRDAPSRKKAKEPTTQITEEVRDQLEASAATRKAFTTFRRE
ADPDDHYQPGEQTQATADKAKDDLEMSAVITIMQPILRFLQLLCENHNRLDLQNFL
15 RCQNNKTNYNLVCETLQFLDCICGSTTGGLGLLYINEKNVALINQTLLESLTEYC
QGPCHENQNCIATHESNGIDIITALLNDINPLGKKRMDLVLELKAKNASKLLLAIM
ESRHDSENAERILYNMRPKELVEVIKAYMQGEVEFEDGENGEDGAASPRNVGH
NIYILAHQLARHNKELQSMKPGGQVDGDEALEFYAKHTAQIEIVRLDRTMEQIVF
PVPSICEFLTKEKSLRIYYTTERDEQGSKINDFFLRSEDLFNEMNWQKKLRAQPVL
20 YWCARNMSFWSSISFNLAFLMNLLVAFFYPFKGVRGGTLEPHWSGLLWTAMLIS
LAIVIALPKPHGIRALIASTILRLIFS VGLQPTLFLLGAFNVCNKIIFLMSFVGNCGTFT
RGYRAMVLDVEFLYHLLYLVICAMGLFVHEFFYSLLLFDLVYREETLLNVIKSVTR
NGRSIILTAVLALLVYLFISVGYLFFKDDFILEVDRLPNETAVPETGESLASEFLFSD
VCRVESGENCSPAPREELVPAEETEQDKEHTCETLLMCIVTVLSHGRLSGGGVGD
25 VLRKPSKEEPLFAARVIYDLLFFFMVIIIVLNLIFGVIIDTFADLRSEKQKKEEILKTT
CFICGLERDKFDNKTVTFEHHIKEEHNMWHYLCFIVLVKVKDSTEYTGPEYVAE
MIKERNLDWFPRMRAMSLVSSDSEGEQNELRNLQEKLESTMKLVTNLSGQLSELK
DQMTEQRKQKQQRIGLLGHPPHMNVNPPQPA
30 SEQ ID No: 17 (KiDins220)
LQLSVKMSVLISQSVINYVEEENIPALKALLEKCKDVDERNECGQTPLMIAAEQGN
LEIVKELIKNGANCNLEDLDNWTALISASKEGHVHIVEELLKCGVNLEHRDMGGW

TALMWACYKGRTDVVELLSSHGANPSVTGLYSVYPIIWAAGRGHADIVHLLLQN
GAKVNCSDKYGTTPLVWAARKGHLECVKHELLAMGADVDQEGANSMTALIVAV
KGGYTQSVKEILKRNPVNLTDKDGNTALMIASKEGHTTEIVQDLLDAGTYVNIPD
RSGDTVLI GAVRGGHVEIVRALLQKYADIDIRGQDNKTALYWAVEKGNATMVRD
5 ILQCNPDTEICTKDGETPLIKATKMRNIEVVELLLDKGAKVSAVDKKGDTPLHIAIR
GRSRKLAELLLRNPKDGRLLYRPNKAGETPYNIDCSHQKSILTQIFGARHLSPTETD
GDMLGYDLYSSALADILSEPTMQPPICVGLYAQWGS GKSFLKKLEDEMKTFAQG
QIEPLFQFSWLIVFLTLLLCGGLGLLFAFTVHPNLGIAVSLSFLALLYIFFIVTYFGGR
REGESWNWAWVLSTRLARHIGYLELLKLMMFVNPPPELPEQTTKALPVRFLFTDYN
10 RLSSVGGETSLAEMIATLSDACEREFGLATRLFRVFKTEDTQGKKKWKKTCCPLS
FVIFLFIIGCIISGITLLAIFRVDPKHLTVNAVLSIASVVGLAFLVNCRTWWQVLDL
LNSQRKRLHNAASKLHKLKSEGFMKVLKCEVELMARMAKTIDSFTQNQTRLVVII
DGLDACEQDKVLQMLDTVRVLFSGKPFIAIFASDPHIIKAINQNLNSVLRDSNING
HDYMRNIVHLPVFLNSRGLSNARKFLVTSATNGDVPCSDTTGIQEDADRRVSQNS
15 LGEMTKLGSKTALNRRD TYRRRQMQRITRQMSFDLTKLLVTEDWFS DISPQTMR
RLNIVSVTGRLLRANQISFNWDRLASWINLTEQWPYRTSWLILYLEETEGIPDQM
TLKTIYERISKNIPTTKDVEPLLEIDGDIRNFEVFLSSRTPVLVARDVKVFLPCTVNL
DPKLREIADVRAAREQISIGGLAYPPLPLHEGPPRAPSGYSQPPSVCSSTS FN GPFA
GGVVSPQPHSSYYSGMTGPQHFPFYNRPFFAPYLYTPRYYPGGSQHLSRPSVKTSL
20 PRDQNNGLEVIKEDAAEGLSSPTDSSRGSGPAPGPVLLNSLNVDAVCEKLKQIEG
LDQSMPLPQYCTTIKKANINGR VLAQCNIDELKKEMNMNFGDWHLFRSTVLEMRN
AESHVVPEDPRFLSESSSGPAPHGEPARRASHNELPHTELSSQTPYTLNFSFEELNTL
GLDEGAPRHSNLSWQSQTRRTPSLSSLNSQDSSIEISKLTDKVQAEYRDAYREYIA
QMSQLEGGPGSTTISGRSSPHSTYYMGQSSSGGSIHSNLEQEKGDSEPKPDDGRK
25 SFLMKRGDVIDYSSSGVSTNDASPLDPITEEDEKSDQSGSKLLPGKKSSERSL FQT
DLKLKGSGLRYQKLPSDEDESGTEESDNTPLLKDDKDRKAEGKVERVPKSPEHSA
EPIRTFIKAKEYLSDALLDKKDSSDSGVRSSSESPNHS LHNEVADDSQLEKANLIEL
EDDSHSGKRGIPHSLSGLQDPILARMSICSEDKKSPSECSLIASSPEENWPACQKAYN
LNRTPTSTVTLN NNSAPANRANQNFDMEGIRETSQVILRPSSSPNPTTIQENENLKSM
30 THKRSQRSSYTRLSKDPPELHAAASSESTGFGEERESIL

MDLEGDRNGGAKKKNFFKLNNKSEKDKKEKKPTVSVFSMFRYSNWLDKLYMVV
GTLAAIIHGAGLPLMMLVFGEMTDIFANAGNLEDLMSNTNRSNDINDTGFFMNL
DMTRYAYYYSGIGAGVLVAAIYQVSFWCLAAGRQIHKIRKQOFFHAIMRQEIGWFD
VHDVGELNTRLTDDVSKINEGIGDKIGMFFQSMATFFTGFIVGFTRGWKLT
5 SPVLGLSAAVWAKILSSFTDKELLAYAKAGAVAEVLA AIRT VIAFGGQKKELER
YNKNLEEAKRIGIKKAITANISIGAAFLLIYASYALAFWYGTTLVLSGEYSIGQVLT
VFFSVLIGAFSVGQASPSIEAFANARGAAYEIFKIIDNKPSIDSYSGHKPDNIKGN
LEFRNVHFSYPSRKEVKILKGLNLKVQSGQTVALVGNSGCGKSTTVQLMQRLYDP
TEGMVSVDGQDIRTINVRFLREIIGVVSQEPVLFATTIAENIRYGRENVTMDEIEKA
10 VKEANAYDFIMKLP HKFDTLVGERGAQLSGGQKQRIAIARALVRNPKILLLDEATS
ALDTESEAVVQVALDKARKGRTTIVIAHRLSTVRNADVIAGFDDGVIVEKGNHDE
LMKEKGIYFKLVMTQTAGNEVELENAADESKSEIDALEMSSNDSRSSLIRKRSTR
SVRGSQAQDRKLSTKEALDESIPPVSFWRIMKLNLTWPYFVVGVFCAIINGGLQP
AFAIIFSIIIGVFTRIDDPETKRQNSNLSLLFLALGIISFITFFLQGFTEGKAGEILTKR
15 LRYMVFRSMLRQDVSWFDDPKNTTGALTTRLANDAAQVKGAIGSRLAVITQ
NIA NLGTGIIISFIYGWQLTLLLLAIVPIIAIAGVVEMKMLSGQALKDKKELEGAGK
IATE AIENFRTVVSLTQEQKFEHMYAQSLQVPYRNSLRKAHIFGITFSFTQAMMYFSYAG
CFRFGAYLV AHKLMSFEDVLLVFS AVVFGAMAVGVVSSFAPDYAKAKISAAHIIM
IIEKTPLIDSYSTEGLMPNTLEGNVTFGEVVFNYPTRPDIPVLQGLSLEVKKGQTLA
20 LVGSSGCGKSTVVQLLERFYDPLAGKVLLDGKEIKRLNVQWLRAHLGIVSQEPILF
DCSIAENIAYGDNRSRVVSQEEIVRAAKEANIHA FIESLPNKYSTKVGDKGTQLSGG
QKQRIAIARALVRQPHILLLDEATSALDTESEKVVQEALDKAREGRTCIVIAHRLST
IQNADLIVVFQNGRVKEHGHQQLLAQKGIYFSMVS VQAGTKRQ

25 SEQ ID No: 19 (Neurotrypsin)

MTLARFVLALMLGALPEVVGFD SVLND SLHHSHRHSP PAGPHYPPYYLPTQQRPPR
TRPPPPLPRFPRPPRALPAQRPHALQAGHTPRPHPWGPCPAGEPWVSVTDFGAPCLR
WAEVPPFLERSPPASWAQLRGQRHNFCSRPDGAGRPWCFYGDARGKVDWGYCD
CRHGSVRLRGGKNEFEGTVEVYASGVWGTVCSSHWDDSDASVICHQLQLGGKGI
30 AKQTPFSGGLIPIYWSNVRCRGDEENILLCEKDIWQGGVCPQKMAAAVTCSFSH
GPTFPPIRLAGGSSVHEGRVELYHAGQWGTVCDDQWDDADAEVICRQLGLSGIAK
AWHQAYFGE GSGPVMLDEV RCTGNEL SIEQCPKSSWGEHNCGHKEDAGVSCTPL

TDGVIRLAGGKGSHEGRLEVYYRGQWGTVCDDGWTELNTYVVCRQLGFKYGKQ
ASANHFEESTGPIWLDDVSCSGKETRFLQCSRRQWGRHDCSHREDVSIACYPGGE
GHRLSLGFPVRLMDGENKKEGRVEVFINGQWGTICDDGWTDKDAAVICRQLGYK
GPARARTMAYFGEGKGPIHVDNVKCTGNERSLADCIKQDIGRHNCRHSEDAGVIC
5 DYFGKKASGNSNKESSLSSVCGLRLLHRRQKRIIGGKNSLRGGWPWQVSLRLKSSH
GDGRLLCGATLLSSCWVLTAAHCFKRYGNSTRSYAVRVGDYHTLVPEEFEEEEIGV
QQIVIHREYRPDRSDYDIALVRLQGPEEQCARFSSHVLPACLPLWRERPQKTASNC
YTTGWGDTGRAYSRTLQQAAPLLPKRFCEERYKGRFTGRMLCAGNLHEHKRVDS
CQGDSSGGLMCERPGESWVVYGVTSWGYGCGVKDSPGVYTKVSAFVPWIKSVT
10 KL

SEQ ID No: 20 (PLD3)

LAVVGFGALMTQLFLWEYGDLHLFGPNQRPAPCYDPCEAVLVESIPEGLDFPNAS
TGNPSTSQAWLGLLAGAHSSLDIASFYWTLTNNDTHTQEPSAQQGEEVLRQLQTL
15 APKGVNVRIAVSKPSGPQPQADLQALLQSGAQVRMVDMQKLTHGVLHTKFWVV
DQTHFYLG SANMDWRS LTQVKELGVVMYNC SCLARDLTKIFEAYWFLGQAGSSI
PSTWPRFYDTRYNQETPMEICLNGTPALAYLASAPPPLCPSGRTPDLKALLNVVDN
ARSFIYVAVMNYLPTLEFSHPHRFWPAIDDGLRRATYERGVKVRLISCWGHSEPS
MRAFLLSLAALRDNHTHSDIQVKLFVVPADAEAQARIPYARVNH NKY MVTERATYI
20 GTSNWSGNYFTETAGTSLLV TQNGRGG LRSQLEAIFLRDWDS PYSHDLDT SADS V
GNACRLL

SEQ ID No: 21 (RetSDR2)

MKFLLDILLLLPLLIVCSLESFVKLFIPKRRKSVTGEIVLITGAGHGIGRLTAYEFAKL
25 KSKLVLDINKHGLEETAACKCKGLGAKVHTFVVDCSNREDIYSSAKKVKA EIGD
VSILVNNAGVVYTSDFATQDPQIEKTFEVNVLAHFWTTKAFLPAMTKNNHGHIV
TVASAAGHVSVPFLLAYCSSKFAAVGFHKTLTDELAALQITGVKTTCLCPNFVNT
GFIKNPSTSLGPTLEPEEVNRLMHGILTEQKMIFIPSSIAFLTTLERILPERFLAVLK
RKISVKFDAVIGYKMK AQ

30
SEQ ID No:22 (APLP2)

MAATGTAAAAATGRLLLLLLVGLTAPALALAGYIEALAAANAGTGFAVAEPQIAM
FCGKLNMHVNIQTGKWEPTDPTGTKSCFETKEEVLQYCQEMYPELQITNVMEANQ
RVSIDNWCRRDKKQCKSRFVTPFKCLVGEFVSDVLLVPEKCCQFFHKERMEVCENH
QHWHTVVKEACLTQGMTLYSYGMLLPCGVDQFHGTEYVCCPQTKIIGSVSKEEEE
5 EDEEEEEEEDEEEDYDVYKSEFPTEADLEDFTAAVDEDEDEDEEEGEEVVEDRDY
YYDTFKGDDYNEENPTEPGSDGTMSDKETHDVKA VCSQEAMTGPCRAVMPRW
YFDLSKGKCVRFYGGCGGNRNNFESEDYCMAVCKAMIPPTPLPTNDVDVYFETS
ADDNEHARFQKAKEQLEIRHRNRMDRVKKEWEEAELQAKNLPKAERQTLIQHFQ
AMVKALEKEAASEKQQLVETHLARVEAMLNDRRRMALENYLAALQSDPPRPHRI
10 LQALRRYVRAENKDRHLHTIRHYQHVLAVDPEKAAQMKSQVMTHLHVIEERRNQS
LSLLYKVPYVAQEIQEIDELLQEQRADMDQFTASISETPVDVRVSSESESEIPPFHP
FHPFPALPENEDTQPELYHPMKKGSVGEQDGGGLIGAEKVINSKNKVDENMVID
ETLDVKEMIFNAERVGGLEEERESVGPLREDFSLSSSALIGLLVIAVAIATVIVISLV
MLRKRQYGTISHGIVEVDPMLTPEERHLNKMQNHGYENPTYKYLEQMQUI

15

SEQ ID No:23 (APP)

MLPGLALLLLAAWTARALEVPTDGNAGLLAEPQIAMFCGRLNMHMNVQNGKWD
SDPSGKTCTCIDTKEGILQYCQEVYPELQITNVVEANQPVTIQNWCKRGRKQCKTHP
HFVIPYRCLVGEFVSDALLVPDKCKFLHQERMDVCETHLHWHTVAKETCSEKSTN
20 LHDYGMMLPCGIDKFRGVFVCCPLAEESDNVDSADAEEDDSDVWWGGADTDY
ADGSEDKVVEVAEEEEVAEVEEEEADDEDEDEDGDEVEEEAEPEYEEATERTTSI
ATTTTTTTESVEEVVREVCSEQAETGPCRAMISRWFYFDVTEGKCAPFFYGGCGGN
RNNFDTEEYCMACVCGSAMSQSLKTTQEPLARDPVKLPTTAASTPDAVDKYLETP
GDENEHAHFQKAKERLEAKHRERMSQVMREWEEAERQAKNLPKADKKA VIQHF
25 QEKVESLEQEAANERQQLVETHMARVEAMLNDRRRLALENYITALQAVPPRPRH
VFNMLKKYVRAEQKDRQHTLKHFEHVRMVDPKKAAQIRSQVMTHLRVIYERMN
QSLSLLYNVPAAVEEIQDEVDELLQKEQNYSDDVLANMISEPRISYGNDALMPSLT
ETKTTVELLPVNGEFLDDLQPWHSFGADSVANTENEVEPVDARPAADRGLTTR
PGSGLTNIKTEEISEVKMDAEFRHDSGYEVHHQKL VFFAEDVGSNKGAIIGLMVGG
30 VVIATVIVITLVMLKKKQYTSIHGVEVDAAVTPEERHLSKMQQNGYENPTYKF
FEQMQRN

SEQ ID No: 24 (SXN1)

MSGELPPNINIKEPRWDQSTFIGRANHFFTVTDPRNILLTNEQLESARKIVHDYRQG
IVPPGLTENELWRAKYTYDSAFHPDTGEKMILIGRMSAQVPMNMTITGCMMTFYR
TTPAVLFWQWINQSFNAV VNYTNRS GDAPLTVNELGTAYVSATTGAVATALGLN
5 ALTKHVSPLIGRFVPFAA VAAANCINPLMRQRELKVGIPVTDENG NRLGESANAA
KQAITQVVVSRILMAAPGMAIPPFIMNTLEKKAFLKRFPWMSAPIQVGLVGFCLVF
ATPLCCALFPQKSSMSVTSLEAELQAKIQESHPELRRVYFNKGL

SEQ ID No: 25 (SORL1)

10 MATRSSRRESRLPFLFTLVALLPPGALCEVWTQRLHGGSAPLPQDRGFLVVQGD
RELRLWARGDARGASRADEKPLRRKRS AALQPEPIKVYGGVSLNDSHNQMVVH
WAGEKSNVIVALARDSLALARP KSSDVYVS YDYGKSFKKISDKLNFGLGNRSEAV
IAQFYHSPADNKRYIFADAYA QYLWITFDFCNTLQGFSIPFRAADLLLHASKASNLLL
GFDRSHPNKQLWKSDDFGQTWIMIQEHVKSFSWGIDPYDKPNTIYIERHEPSGYST
15 VFRSTDFQ SRENQEVILEEVRDFQLRDKYMFATKV VHLLGSEQQSSVQLWVSFG
RKPMRAAQFVTRHPINEYYIADASEDQVFVCVSHSNRNTNLYISEAEGLKFSLSLE
NVLYYSPGGAGSDTLVRYFANE PFADFH RVEGLQGVYIATLINGSMNEENMRSVI
TFDKGGTWEFLQAPAFTGYGEKINCELSQGCSLHLAQRLSQLNLQLRRMPILSKE
SAPGLIATGSVGKNLASKTNVYISSAGARWREALPGPHYTTWGDHGGIITAIAQ
20 GMETNELKYSTNEGETWKTFIFSEKPVFVYGLLTEPGEKSTVFTIFGSNKENVHSW
LILQVNATDALGV PCTENDYKLWSPS DERGNECLLGHKTVFKRRTPHATCFNGED
FDRPVVVSNC SCTREDYECDFGFKMSEDL SLEVCVPDPEFSGKSYSPVPCPVGST
YRRTRGYRKISGDTCSGGDVEARLEGE LVPCLAEENEFILYAVRKSIYRYDLASG
ATEQLPLTGLRAAVALDFDYEHNCLY WSDLALDVIQRLCLNGSTGQEVINSLET
25 VEALAFEPLSQLLYWVDAGFKKIEVANPDGDFRLTIVNSSVLDRPRALVLVPQEGV
MFWTDWGD LKPGIYRSNM DGSAAYHLVSEDVKWPNGISVDDQWIYWTDAYLEC
IERITFSGQQRSVILDNLPHYAIAVFKNEIYWDDWSQLSIFRASKYSGSQMEILAN
QLTGLMDMKIFYKGKNTGSNACVPRPCSL LCLPKANNRSRSCRCPEDVSSSVLPSG
DLMCD CPQGYQLKNNTCVKEENTCLRNQYRCSNGNCINSIWWCDFDND CGDMS
30 DERNCP TTICDLDTQFRCQESGTCIPLSYKCDLEDDCGDNSDESHCEMHQCRSDEY
NCSSGMCIRSSWVCDGDND CRDWSDEANCTAIYHTCEASN FQCRNGHCIPQRWA
CDGDTDCQDGSDEDPVNCEKKCNGFRCPNGTCIPSSKHCDGLRDCSDGSDEQHCE

PLCTHFMDFVCKNRQQCLFHSMVCDGIIQCRDGSDEDAAFAGCSQDPEFHKVCDE
FGFQCQNGVCISLIWKCDGMDDCGDYSDEANCENPTEAPNCSR YFQFRCENGHCI
PNRWKCDREND CGDWSDEKDCGDSHILPFSTPGPSTCLPNYYRCSSGTCVMDTW
VCDGYRDCADGSDEEACPLL ANVTAASTPTQLGRCDRFEFECHQPKTCIPNWKRC
5 DGHQDCQDGRDEANCPTHSTLT CMSREFQCEDGEACIVLSERCDGFLDCSDESDE
KACSDELTVYKVQNLQWTADFSGDVTLTWMRPKKMPSASCVYNVYYRVVGESI
WKTLETHSNKTNTVLKVLKPDTTYQVKVQVQCLSKAHNTNDFVTLRTPEGLPDA
PRNLQLSLPREAEGVIVGHWAPPIH THGLIREYIVEYSRSGSKMWASQRAASNFTI
KNLLVNTLYTVRVA AVTSRGIGNWSDSKSITTKGKVIPPPDIHIDSYGENYLSFTLT
10 MESDIKVNGYVVNLFWAFDTHKQERRTLNFRGSILSHKVGNLTAHTSYEISAWAK
TDLGDSPLAFEHVMTRGVRPPAPSLKAKAINQTA VECTWTGPRNVVYGIFYATSF
LDLYRNP KSLTTS LHNKT VIVSKDEQYLFLVRVVVPYQGPSSDYVVVKMIPDSRLP
PRHLHVHTGKTSVVIK WESPYDSPDQDLLY AIAVKDLIRKTDRSYKVKS RNSTV
EYTLNKLEPGGKYHIIVQLGNMSKDSSIKITTVSLSAPDALKIITENDHVLLFWKSL
15 ALKEKHFNESRGYEIHMFD SAMNITAYLGNTTDNFFKISNLKMGHNYTFTVQARC
LFGNQICGEPAILLYDELGSGADASATQAARSTDVAAVVVPILFLILLSLGVGFAIL
YTKHRR LQSSFTA FANSHYSSRLGSAIFSSGDDLGEDDEDAPMITGFSDDVPMVIA

SEQ ID No: 26 (SPC18)

20 MSLDFLDDVRRMNRQLYYQVLNFGMIVSSALMIWKGLM VITGSESPIVVVL SG
SMEPAFHRGDLLFLTNRVEDPIRVGEIVVFRIEGREIPVHRVLKIHEKQNGHIKFLT
KGDNNAVDDRGLYKQGQHWLEKKDVVGRARGFVPYIGIVTILMNDYPKF KYAV
LFLGLFVLVHRE

25 SEQ ID No: 27 (SPC22)

MNTVLSRANS LFAFSLSVMAALTFGCFITTA FKDRSVPVRLHVSRI MLKNVEDFTG
PRERSDLGFITSDITADLENIFDWNVKQLFLYLSAEYSTKNNALNQVVLWDKIVLR
GDNPKLLLKDMKTKYFFFDDGNGLKGNRNVTLT LSWNVVPNAGILPLVTGSGHV
SVPFPDTYEITKSY

30

SEQ ID No: 28 (SPC25)

MAAAAVQGGRRSGGSGGCSGAGGASNCGTGSGRSGLLDKWKIDDKPVKIDKWDG
SAVKNSLDDSAKKVLLEKYKYVENFGLIDGRLTICTISCFFAIVALIWDYMHPFPES
KPVLAALCVISYPLFMLSFMGILTYTSYKEKSIFLVAHRKDPTGMDPDDIWQLS
SSLRFDKDYTLKLTIFISGRTKQQREAEFTKSIKFFDHSGTLVMDAYEPEISRLHD
5 SLAIERKIK

SEQ ID No: 29 (stearoyl-CoA desaturase)

MPAHLQDDISSSYTTTTTITAPPSRVLQNGGDKLETMPLYLEDDIRPDIKDDIYDP
TYKDKEGPPSPKVEYVWRNIIILMSLLHLGALYGITLIPTCKFYTWLWGVFYFVSAL
10 GITAGAHRLWSHRSYKARLPLRLFLIANTMAFQNDVYEWARHDHRAHHKFSETHA
DPHNSRRGFFFSHVGVLLVRKHPAVKEKGSTLDLSDLEAEKLVMFQRRYYKPGL
LMMCFILPTLVPWYFWGETFQNSVFVATFLRYAVVLNATWLVNSAAHLFGYRPPY
DKNISPRENIVSLGAVGEGFHNHYHHSFPYDYSASEYRWHINFTTFFIDCMAALGL
AYDRKKVSKAAILARIKRTGDGNYKSG
15

SEQ ID No: 30 (TMP21)

MSGLSGPPARRGPFPLALLLLFLLGPRLVLAISFHLPIINSRKCLREEIHKDLLVTGAY
EISDQSGGAGGLRSHLKITDSAGHILYSKEDATKGKFAFTTEDYDMFEVCFESKGT
GRIPDQLVILDMKHGVEAKNYEEIAKVEKLPLEVELRRLEDLSEIVNDFAYMKK
20 REEEMRDTNESTNTRVLYFSIFSMFCLIGLATWQVFYLRFFKAKKLIE

SEQ ID No: 31 (VLCAD)

MSGCGLFLRTTAAARACRGLVVSTANRRLLRTSPPVRAFAKELFLGKIKKKEVFPF
PEVSQDELNEINQFLGPVEKFFTEEVDNRKIDQEGKIPDETLEKLKSLGLFGLQVPEE
25 YGGLGFSNTMYSRLGEIISMDGSITVTLAAHQAIGLKGILAGTEEQKAKYLPKLAS
GEHIAAFCLTEPASGSDAASIRSRATLSEDKKHYILNGSKVWITNGGLANIFTVFAK
TEVVDSGDSVKDKITAFIVERDFGGVTNGKPEDKLGIRGSNTCEVHFENTKIPVENI
LGEVGDGFKVAMNIIILNSGRFSMGSVVAGLLKRLIEMTAEYACTRKQFNKRLSEFG
LIQEKFALMAQKAYVMESMTYLTAGMLDQPGFPDCSIEAAMVKVFSSEAAWQCV
30 SEVLQILGGLGYTRDYPYERILRDTRILLIFEGTNEILRMYIALTGLQHAGRILTTRI
ELKQAKVSTVMDTVGRRLRDSLGRTVDLGLTGNGHGVVHPSLADSANKFEENTYC
FGRTVETLLLRFGKTIMEEQVLKRVANILINLYGMTAVLSRASRSIRIGLRNHDHE

VLLANTFCVEAYLQNLFSLSQLDKYAPENLDEQIKKVSQQILEKRAYICAHPLDRT
C

SEQ ID No: 32 (YMEIL1)

5 MFSLSSTVQPQVTVPLSHLINAFHTPKNTSVSLSGVSVSQNQHRDVVPEHEAPSSEP
SLNLRDLGLSELKIGQIDQLVENLLPGFCKGKNISSHWHTSHVSAQSFFENKYGNL
DIFSTLRSSCLYRHHSRALQSICSDLQYWPVFIQSRGFKTLKSRTRRLQSTSERLAET
QNIAPSFVKGFLLRDRGSDVESLDKLMKTKNIPEAHQDAFKTGFAEGFLKAQALT
QKTNDSLRRTRLILFVLLLFGIYGLLKNPFLSVRFRTTTGLDSAVIDPVQMKNVTFE
10 HVKGVVEEAKQELQEVVEFLKNPQKFTILGGKLPKGILLVGPPGTGKTLLARAVAG
EADVPFYYASGSEFDEMFGVGVGASRIRNLFREAKANAPCVIFIDELDSVGGKRIESP
MHPYSRQTINQLLAEMDGFKPNEGVIIGATNFPEALDNALIRPGRFDMQVTVPRP
DVKGRTEILKWYLNKIKFDQSVDEIARGTVGFSGAELENLVNQAALKA AVDGK
EMVTMKELEFSKDKILMGPERRSVEIDNKNKTITAYHESGHAILA YYTKDAMPINK
15 ATIMPRGPTLGHVSLLPENDRWNETRAQLLAQMDVSMGGRVAEELIFGTDHITTG
ASSDFDNATKIAKRMVTKFGMSEKLGVM TYSDTGKLS PETQSAIEQEIRILLRDSY
ERAKHILKTHAKEHKNLAEALLTYETLDAKEIQIVLEGKKLEVR

SEQ ID No: 33 (LAPTM4B)

20 MVNYAWAGRSQRKLWWRSVAVL TCKSVVRPGYRGGLQARRSTLLKTCARARA
TAPGAMKMVAPWTRFYNSCCLCCHVRTGTILLGVWYLIINAVVLLILLSALADP
DQYNFSSSELGGDFEFMDDANMCIAIAISLLMILICAMATYGAYKQRAAWIIPFFC
YQIFDFALNMLVAITVLIYPNSIQEYIRQLPPNFPYRDDVMSVNPTCLVLIILLFISIL
TFKGYLISCVWNCYRYINGRNSSDVLVYVTSNDTTVLLPPYDDATVNGAAKEPPP
25 PYVSA

SEQ ID No: 34 (S100alpha)

MGSELETAMETLINVFHAHSGKEGDYKLSKKELKELLQTELSGFLDAQKD VDA
VDKVMKELDENG DGEVDFQEYVVLVAALT VACNNFFWENS

30

SEQ ID No:35 (Cadherin EGF LAG seven-pass G-tpe receptor 2)

MRSPATGVPLPTPPPPLLLLLLLLLLPPPLLGDQVGPCRSLGSRGRGSSGACAPMGW
LCPSSASNLWLYTSRCRDAGTELTGHLVPHHDGLRVWCPESEAHIPPLPAPEGCPW
SCRLLGIGGHLSPQGKLTLP EEHPCLKAPRLRCQSKLAQAPGLRAGERSPEESLG
GRRKRVNTAPQFQPPSYQATVPENQPAGTPVASLRAIDPDEGEAGRLEYTMDAL
5 FDSRSNQFFSLDPVTGAVTTAEELDRETKSTHVFRVTAQDHGMPRRSALATLTILV
TDTNDHDPVFEQQEYKESLRENLEVGYEVLTVRATDGDAPPNANILYRLLEGSSG
SPSEVF EIDPRSGVIRTRGPVDREEVESYQLTVEASDQGRDPGPRSTTAAVFLSVED
DNDNAPQFSEKRYVVQVREDVTPGAPVLRVTASDRDKGSNAV VHYSIMSGNARG
QFYLDAQTGALDVVSPLDYETTKEYTLRVRAQDGGRPPLSNVSGLVTVQVLDIND
10 NAPIFVSTPFQATVLESVPLGYLVLHVQAIDADAGDNARLEYRLAGVGHDFPFTIN
NGTGWISVAAELDREEVD FYSFGVEARDHGTPALTASASVSVTVLDVNDNNPTFT
QPEYTVRLNEDAAVGTSVVTVSAVDRDAHSVITYQITSGNTRNRFSITSQSGGGLV
SLALPLDYKLERQYVLA VTASDGTRQDTAQIVNVNTDANTHRPVFQSSHYTVNV
NEDRPAGTTVVLISATDEDTGENARITYFMEDSIPQFRIDADTGAVTTQAELDYED
15 QVSYTLAITARDNGIPQKSDTTYLEILVNDVNDNAPQFLRDSYQGSVYEDVPPFTS
VLQISATDRDSGLNGRVFYTFQGGDDGDGDFIVESTSGIVRTLRLRDRENV AQYVL
RAYAVDKGMPPARTPMEVTVTVLDVNDNPPVFEQDEFDVFVEENSPIGLAVARVT
ATDPDEGTNAQIMYQIVEGNIPEVFQLDIFSGELTALVDLDYEDRPEYVLVIQATSA
PLVSRATVHVRLDDRNDNPPVLGNFEILFN NYVTNRSSSFPGGAIGRVP AHD PDISD
20 SLTYSFERGNELSLVLLNASTGELKLSRALDNNRPLEAIMSVLVSDGVHSVTAQCA
LRVTITDEMLTHSITLRLEDMSPERFLSPLLGLFIQAVAATLATPPDHVVVFNVQR
DTDAPGGHILNVSLSVGQPPGPGGGPPFLPSED LQERLYLNRSLT AISAQRVLPFD
DNICLREPCENYMRCVSVLRFDSSAPFIASSSVLFRPIHPVGGLRCRCPPGFTGDYC
ETEVDLCYSRPCGPHGRCRSREGGYTCLCRDGYTGEHCEVSARSGRCTPGVCKNG
25 GTCVNLLVGGFKCDCPSGDFEKP YCQVTTRSFP AHSFITFRGLRQRFHFTLALS FAT
KERDGLLLYNGRFNEKHDFVALEVIQE QVQLTFSAGESTTTVSPFVPGGVSDGQW
HTVQLKYYNKPLL GQTGLPQGPSEQKVA VVTVDGCDTGVALRFGSVLGNYS CAA
QGTQGGSKKSLDLTG PLLGGVPDLPESFPVRMRQFVGCMRNLQVDSRHIDMADF
IANNGTVPGCPAKKNVCDSNTCHNGGTCVNQWDAFSCECPLGFGGKSCAQEMAN
30 PQHFLGSSLVAWHGLSLPISQPWYLSLMFRTRQADGVLLQA ITRGRSTITLQLREG
HVMLSVEGTGLQASSLRLEPGRANDGDWHHAQLALGASGGPGHAILSFDY GQQR
AEGNLGPR LHGLHLSNITVGGIPGPAGGVARGFRGCLQGVRVSDTPEGVNSLDPSH

GESINVEQGCSLPDPCDSNPCPANSYCSNDWDSYSCSCDPGYYGDNCTNVCDLNP
CEHQSVCTRKPSAPHGYTCECPPNYLGPYCETRIDQPCPRGWWGHPTCGPCNCDV
SKGFDPDCNKTSGECHCKENHYRPPGSPTCLLCDCYPTGSLSRVCDPEDGQCPCPKP
GVIGRQCDRCDNPF AEVTTNGCEVNYDSCPRAIEAGIWWPRTRFGLPAAAPCPKG
5 SFGTAVRHCD EHRGWLPNLFNCT SITFSELKGFAERLQRNESGLDSGRSQQLALL
LRNATQHTAGYFGSDVKVAYQLATRLLAHESTQRGFGLSATQDVHFTENLLRVG
SALLDTANKRHWELIQQTEGGTAWLLQH YEAYASALAQNMRHTYLSPTTIVTPNI
VISVVRLDKGNFAGAKLPRYEALRGEQPPDLETTVILPESVFRETTPVVRPAGPGEA
QEPEELARRQRRHPELSQGEAVASVITYRTL AGLLPHNYDPDKRSLRVPKRPINTP
10 VVSISVHDDEELLPRALDKPVTVQFRLL ETEERTK PICVFWNHSILVSGTGGWSAR
GCEVVFRNESHVSCQCNHMTSFAVLMDVSRRENGEILPLKTLTYVALGVTLAALL
LTFFFLTLRLRSNQH GIRRNLTAALGLAQLVFL LGINQADLPFACTVIAILLHFLY
LCTFSWALLEALHLYRALTEVRDVNTGPMRFY YMLGWGVPAFTTGLAVGLDPEG
YGNPDFCWLSIYDTLIWSFAGPVAF AVSMSVFLYILAARASCAAQRQGFEEKGPV
15 SGLQPSFAVLLLLSATWLLALLSVNSDTLL FHYL FATCNCIQGPFI FL SYVVLSKEV
RKALKLACSRKPSDPALT TKTSTLTSSYNCPSPYADGRLYQPYGDSAGSLHSTSR
GKSQPSYIPFLLREESALNPGQGPPGLGDPGSLFLEGQDQQHDPD TSDSDLSLEDD
QSGSYASTHSSDSEEEEEEEEEEEA AFPGEQGWDSLLGPGAERLPLHSTPKDGGPGP
GKAPWPGDFGTTAKESSGNGAPEERLRENGDALSREGSLGPLPGSSAQPHKGILKK
20 KCLPTISEKSSLLRLPLEQCTGSSRGSSASEGSRGGPPPRPPPRQSLQEQLNGVMPIA
MSIKAGTVDEDSSGSEFLFFNFLH

SEQ ID No:36 (Calsyntenin)

MLRRPAPALAPAARLLL AGLLCGGGVWAARVNKHKPWLEPTYH GIVTENDNTVL
25 LDPPLIALDKDAPLRFAESFEVTVTKEGEICGFKIHGQNPFD AVVVDKSTGEGVIR
SKEKLDCELQKDYSFTIQAYDCGKGPDGTVNKKSHKATVHIQVNDVNEYAPVFK
EKSYKATVIEGKQYDSILRVEAVDADCSPQFSQICSYEITPDVPFTVDK DGYIKNTE
KLNYGKEHQYKLTVTAYDCGKKRATEDVLVKISIKPTCTPGWQGWNNRIEYEPG
TGALAVFPNIHLETCD EPPVASVQATVELETSHIGKGCDRDTYSEKSLHRLCGAAAG
30 TAELLPSPSGSLNWTMGLPTDNGHDS DQVFEFNGTQAVRIPDGVVSVSPKEPFTIS
VWMRHGPFGRKKETILCSSDKTDMNRHHYSLYVHGCRLIFLFRQDPSEEKKYRPA
EFHWKLNQVCDEEWHHYVLNVEFPSVTLYVDGTSHEPFSVTEDYPLHPSKIETQL

VVGACWQEFSGVENDNETEPVTVASAGGDLHMTQFFRGNLAGLTLRSGKLADKK
VIDCLYTCKEGLDLQVLEDSEGRGVQIQAHPSQLVLTLEGEDLGELDKAMQHISYL
NSRQFPTPGIRRLKITSTIKCFNEATCISVPPVDGYVMVLQPEEPKISLSGVHHFARA
ASEFESSEGVFLFPELRIISTITREVEPEGDGAEDPTVQESLVSEEIVHDLDTC EVTVE
5 GEELNHEQESLEVDMARLQQKGIEVSSSELGMTFTGVDTMASYEEVLHLLRYRN
WHARSLDRKFKLICSELNGRYSISNEFKVEVNVIIHTANPMEHANHMAAQPQFVHP
EHRSFVDLSGHNLANPHPFVVPSTATVVIVVCVSFLVFMILGVFRIRAAHRRMT
RDQDTGKENEMDWDDSAITITVNPMEYEDQHSSEEEEEEEEEEEEESEDGEEEDDIT
SAESESSEEEEGEQGDPQONATRQQQLEWDDSTLSY

10

SEQ ID No: 37 (visinin-like 1)

MGKQNSKLAPVEMEDLVKSTEFNEHELKQWYKGFLKDCPSGRLNLEEFQQLYVK
FFPYGDASKFAQHAFRTFDKNGDGTIDFREFICALSITSRGSFEQKLNWAFNMYDL
DGDGKITR VEMLEIEAIYKMVGTVIMMKMNEDGLTPEQRVDKIFSKMDKNKDD
15 QITLDEFKEAAKSDPSIVLLLQCDIQK

SEQ ID No: 38 (BACE1)

MAQALPWLLLWMGAGVLPAGHTQH GIRLPLRSGLGGA PLGLRLPRETDEEPEEPG
RRGSFVEMVDNLRGKSGQGYVEMTVGSPQTLN ILVDTGSSNFAVGAAPHPFLH
20 RYYQRQLSSTYRDLRKG VYVPYTQGWEGELGTDLLCGAGFPLNQSEVLASVGG
SMIIGGIDHSLYTGSLWYTPIRREWYEVIIVRVEINGQDLKMDCKEYNYDKSIVDS
GTTNLRLPKKVFEEAAVKSIIKAASSTEKFPDGFWLGEQLVCWQAGTTPWNIFPVISL
YLMGEVTNQSFRTILPQQYLRPVEDVATSQDDCYKFAISQSSTGTVMGAVIMEGF
YVVFDRARKRIGFAVSACHVHDEFRTAAVEGPFVTLDMEDCGYNIPQTDESTLMT
25 IAYVMAAICALFMLPLCLMVCQWRCLRLRQQHDDFADDISLLK

SEQ ID No: 39 (CELSR2)

MRSPATGVPLPTPPPPLLLLLLLLLLPPPLLGDQVGPCRSLSRGRGSSGACAPMGW
LCPSSASNLWLYTSRCDAGTELTHGLVPHHDGLRVWCPESEAHIPPLPAPEGCP
30 WSCRLLGIGGHLSPQGKLTLP EEHPCLKAPRLRCQSCKLAQAPGLRAGERSPEESL
GGRRKRNVTAPQFQPPSYQATVPENQAGTPVASLRAIDPDEGEAGRLEYTMDA
LFDSSRNQFFSLDPVTGAVTTAEELDRETKSTHVFRVTAQDHGMPRRSALATLTIL

VTDTNDHDPVFEQQEYKESLRENLEVGYEVLTVRATDGDAPPNANILYRLLEGSG
GSPSEVFEIDPRSGVIRTRGPVDREEVESYQLTVEASDQGRDPGPRSTTAAVFLSVE
DDNDNAPQFSEKRYVVQVREDVTPGAPVLRVTASDRDKGSNAVHYSIMSGNAR
GQFYLDAQTGALDVVSPLDYETTKEYTLRVRAQDGGRPPLSNVSGLVTVQVLDIN
5 DNAPIFVSTPFQATVLESVPLGYLVLHVQAIDADAGDNARLEYRLAGVGHDFPFTI
NNGTGWISVAAELDREEVDFYSFGVEARDHGTALTASASVSVTVLDVNDNNPTF
TQPEYTVRLNEDAAVGTSVVTVSAVDRDAHSVITYQITSGNTRNRFSITSQSGGGL
VSLALPLDYKLERQYVLA VTASDGTRQDTAQIVNVNVDANTHRPVFQSSHYTVN
VNEDRPAGTTVVLISATDEDTGENARITYFMEDSIPQFRIDADTGAVTTQAELDYE
10 DQVSYTLAITARDNGIPQKSDTTYLEILVNDVNDNAPQFLRDSYQGSVYEDVPPFT
SVLQISATDRDSGLNGRVFYTFQGGDDGDGDFIVESTSGIVRTLRLDRENVAAQYV
LRA YAVDKGMPPARTPMEVTVTVLDVNDNPPVFEQDEFDVFVEENSPIGLAVAR
VTATDPDEGTNAQIMYQIVEGNIPEVFQLDIFSGELTALVDLDYEDRPEYVLVIQAT
SAPLVSRATVHVRLLDNRNDNPPVLGNFEILFN NYVTNRSSSFPGGAIGRVPAHDPDI
15 SDSLTYSFERGNELSLVLLNASTGELKLSRALDNNRPLEAIMSVLVSDGVH SVTAQ
CALRV TITTEMLTHSITLRL EDMSPERFLSPLLGLFIQAVAATLATPPDHVVVFNV
QRDTDAPGGHILNVSLSVGQPPGPGGGPPFLPSEDLQERLYLNRSLT AISAQRVLP
FDDNICLREPCENYMRCVSVLRFDSSAPFIASSSVLFRPIHPVGGLRCRCPPGFTGD
YCETEVDLCYSRPCGPHGRCRSREGGYTCLCRDGYTGEHCEVSARSGRCTPGVCK
20 NGGTCVNLLVGGFKCDCPSGDFEKP YCQVTTRSFP AHSFITFRGLRQRHFHTLALS
FATKERDGLLLYNGRFNEKHDFVALEVIQEQVQLTFSAGESTTTVSPFVPGGVSDG
QWHTVQLKYYNKPLL GQTGLPQGPSEQKVA VVTVDGCDTGVALRFGSVLGNYS
CAAQGTQGGSKKSLDLTGPLLGGVPDLPESFPVRMRQFVGCMRNLQVDSRHID
MADFIANNGTVPGCPAKKNVCDSENTCHNGGTCVNQWDAFSCECPLGFGGKSCAQ
25 EMANPQHFLGSSLVAWHGLSLPISQPWYLSLMFRTRQADGVLLQAITRGRSTITLQ
LREGHVMLSVEGTGLQASSLRLEPGRANDGDWHHAQLALGASGGPGHAILSFDY
GQQR AEGNLGPRLHGLHLSNITVGGIPGPAGGVARGFRGCLQGVRVSDTPEGVNS
LDPSHGESINVEQGCSLPDPCDSNPCPANSYCSNDWDSYSCSCDPGY YGDNCTNV
CDLNPCEHQSVCTRKPSAPHGYTCECPPNYLGPYCETRIDQPCPRGWGWHPTCGP
30 CNCDVSKGFDPDCNKTSGECHCKENHYRPPGSPTCLLCDCYPTGSLSRVCDPEDG
QCPCKPGVIGRQCDRC DNPF AEVT TNGCEVNYDSCPRAIEAGIWWPRTRFGLPAA
APCPKGSFGTAVRHCDEHRGWLPNLFNCT SITFSELKGFAERLQRNESGLDSGRS

QQLALLRNATQHTAGYFGSDVKVAYQLATRLLAHESTQRGFGLSATQDVHFTE
NLLRVGSALLDTANKRHWELIQQTGGTAWLLQHIEAYASALAQNMRTYLSFP
TIVTPNIVISVVRLDKGNFAGAKLPRYEALRGEQPPDLETTVILPESVFRETTPVVRP
AGPGEAQEPEELARRQRRHPELSQGEAVASVIIYRTLGLLPHNYDPDKRSLRVPK
5 RPIINTPVVSISVHDDEELLPRALDKPVTVQFRLLTEERTKPKICVFWNHSILVSGTG
GWSARGCEVVFRNESHVSCQCNHMTSFAVLMDVSRRENGEILPLKTLTYVALGV
TLAALLLTFFFLTLLRILRSNQHGIRRNLTAAALGLAQLVFLGINQADLPFACTVIAI
LLHFLYLCTFSWALLEALHLYRALTEVRDVNTGPMRFYYMLGWGVPAFITGLAV
GLDPEGYGNPDFCWLSIYDTLIWSFAGPVAFVSMVSFLYILAARASCAAQRQGF
10 EKKGPVSGLQPSFAVLLLSATWLLALLSVNSDTLLFHLYFATCNCIQGPFFILSYV
VLSKEVRKALKLACSRKPSDPALTSTLTSSYNCPSPYADGRLYQPYGDSAGSL
HSTSRSGKSQPSYIPFLREESALNPGQGPPGLGDPGSLFLEGQDQQHDPDSDSDSD
LSLEDDQSGSYASTHSSDSEEEEEEEEEEEAAFPGEQGWDSLLGPGAERLPLHSTPK
DGGPGPGKAPWPGDFGTAKESSGNGAPEERLRENGDALSREGSLGPLPGSSAQF
15 HKGILKKKCLPTISEKSSLLRPLEQCTGSSRGSSASEGSRGGPPPPRPPPRQSLQEQ
NGVMPIAMSIKAGTVDEDSSGSEFLFFNFLH

SEQ ID No: 40 (FADS2)

MGKGGNQGEAAEREVSVPFWSWEEIQKHNLRTDRWLVIDRKVYNITKWSIQHP
20 GGQRVIGHYAGEDATDAFRAHPDLEFVGKFLKPLLIGELAPEEPSQDHGKNSKIT
EDFRALRKTAEEDMNLFKTNHVFFLLLLAHIALESIAWFTVFYFGNGWIPTLITAFV
LATSQAQAGWLQHDYGHLSVYRKPKWNHLVHKFVIGHLKGASANWWNHRHFQ
HHAKPNIFHKDPDVNMLHVFVLGEWQPIEYGGKKLKYLPYNHQHEYFFLIGPPLLI
PMYFQYQIIMTMIVHKNWVDLAWAVSYIRFFITYIPFYGILGALLFLNFIRFLESH
25 WFVWVTQMNHIVMEIDQEAYRDWFSSQLTATCNVEQSFFNDWFSGHLNFQIEHH
LFPTMPRHNHKKIAPLVKSLCAKHGIEYQEKPLLRAALLDIRSLKKSGKLWLDAYL
HK

SEQ ID No: 41 (NogoA)

30 MEDLDQSPLVSSSDSPRPQPAFKYQFVREPEDEEEEEEEEEDEDEDLEELEVLER
TEFSELEYSEMGSFSVSPKAESAIVIVANPREEIVKKNDEEEKLVSNILHNQQELP
TALTCLVKEDEVVSSEKAKDSFNEKRVAVEAPMREEYADFKPFERVWEVKDSKE

DSDMLAAGGKIESNLESKVDKKCFADSLEQTNHEKDSSESNDDTSFPSTPEGIKDR
SGAYTTCAPFNPAATESIATNIFLLGDPTSENKTDEKKIEEKKAAQIVTEKNTSTKTS
NPFLVAAQDSETDYVTTDNLTKVTEEVVANMPEGLTPDLVQEACESELNEVTGTK
IAYETKMDLVQTSEVMQESLYPAAQLCPSFEESEATPSPVLPDIVMEAPLNSAVPS
5 AGASVIQPSSSPLEASSVNYESIKHEPENPPPYEEAMSVSLKKVSGIKEEIKEPENIN
AALQETEAPYISIACDLIKETKLSAEPAPDFSDYSEMAKVEQVPDHSELVEDSSPD
SEPVDLFSDDSIPDVPQKQDETVMLVKESLTETSFESMIEYENKEKLSALPPEGGKP
YLESFKLSLDNTKDTLLPDEVSTLSKKEKIPLQMEELSTAVYSNDDLFIKEAQIRE
TETFSOSSPIEIDEFPTLISSKTDSFSKLAREYTDLEVSHKSEIANAPDGAGSLPCTEL
10 PHDLSLKNIQPKVEEKISFSDDFSNGSATSQVLLLPDVSALATQAEIESIVKPKVL
VKEAEKKLPDTEKEDRSPSAIFSAELSKTSVVDLLYWRDIKKTGVVFGASLFLLLS
LTVFSIVSVTAYIALALLSVTISFRIYKGVIAIQKSDEGHPFRAYLESEVAISEELVQ
KYSNSALGHVNCTIKELRRLFLVDDLVDLSKFAVLMWVFTYVGALFNGLTLLILA
LISLFSVPVIYERHQAQIDHYLGLANKNVKDAMAKIQAKIPGLKRKAE

15
SEQ ID No: 42 (OS-9)

MAAETLLSSLLGLLLLGLLLPASLTGGVGSNLLEELSEMRYGIEILPLPVMGGQSQS
SDVVIVSSKYKQRYECRLPAGAIHFQREEREETPAYQGPGIPELLSPMRDAPCLLKT
KDWWTYEFCYGRHIQQYHMEDSEIKGEVLYLGYYSQAFDWDDetakaskQHRL
20 KRYHSQTYGNGSKCDLNGRPREAEVRFLCDEGAGISGDYIDRVDEPLSCSYVLTIR
TPRLCPHPLLRPPPSAAPQAILCHPSLQPEEYMAVYVQRQAVDSKQYGDKIIEELQDL
GPQVWSETKSGVAPQKMAGASPTKDDSKDSDFWKMLNEPEDQAPGGEEVPAEE
QDPSPEAADSASGAPNDFQNNVQVKVIRSPADLIRFIEELKGGTKKKGKPNIGQEQP
VDDAAEVPQREPEKERGDPERQREMEEEEEDEDEDEDEDERQLLGEFEKELEGIL
25 LPSDRDLRSEVKAGMERELENIIQEASPALPTEKELDPDGLKKESERDRAMLAL
TSTLNKLIKRLKQSPQLVKKHKKKRVPKPPSPQPTTEEDPEHRVRVRVTCLR
LGGPNQDLTVLEMKRENPLKQIEGLVKELLEREGLTAAAGKIEIKIVRPWAEGTEE
GARWLTDTRNLKEIFFNILVPGAEEAQKERQRQKELESNYRRVWGSPGGEGTG
DLDEFDF

30
SEQ ID No: 43 (PDGFRB)

MRLPGAMPALALKGELLILLSLLLLLEPQISQGLVVTTPGPPELVLNVSSTFVLTCSGS
APVVWERMSQEPPQEMAKAQDGTSSVLTLTNLTGLDTGEYFCTHNSRGLETDE
RKRLYIFVPDPTVGFLPNDAEELFIFLTEITEITPCRVTDLPQLVVTLHEKKGDVALP
VPYDHQRGFGSIFEDRSYICKTTIGDREVDSDAYYVYRLQVSSINVSNAVQTVVR
5 QGENTILMCIVIGNEVVNFEWTPRKEVIGRLVEPVTDFLLDMPYHIRSILHIPS AEL
EDSGTYTCNVTESVNDHQDEKAINITVVESGYVRLLEGEVGTQLQFAELHRSRTLQV
VFEAYPPPTVLWFKDNRTLGDSSAGEIALSTRNVSETRYVSELTLVRVKVAEAGH
YTMRAFHEDA EVQLSFQLQINVPVRVLELSESHPDSSGEQTVRCRGRGMPQPNIWS
ACRDLKRCPRELPPTLLGNSSEEEESQLETNVTYWEEEQEFVVSTLRLQHVDRLPS
10 VRCTLRNAVGDQTQEVIVPHSLPFBKVVVISAILALVVLTIISLILIMLWQKKPRYE
IRWKVIESVSSDGHEYTYVDPMQLPYDSTWELPRDQLVLGRTLGSAGFGQVVEAT
AHGLSHSQATMKVAVKMLKSTARSSKQALMSELKIMSHLGPLNVNLLGACT
KGGPIYITEYCRYGDLVDYLHRNKHTFLQHHS DKRRPPSAELYSNALPVGLPLPS
HVSLTGESDGGYMDMSKDESVDYVPM LDMKGDVKYADIESSNYMAPYDNYVPS
15 APERTCRATLINESPVLSYMDLVGFSYQVANGMEFLASKNCVHRDLAARNVLICE
GKLVKICDFGLARDIMRDSNYISKGSTFLPLKWMAPESIFNSLYTTLSDVWSFGILL
WEIFTLGGTPYPELPMNEQFYNAIKRGYRMAQPAHASDEIYEMQKCWEEKFEIRP
PFSQLVLLLERLLGEGYKKKYQQVDEEFLRSDHPAILRSQARLPGFHGLRSPLDTSS
VLYTAVQPNEGDNDYIPLPDPKPEVADEGPLEGSPSLASSTLNEVNTSSTISCDSP
20 EPQDEPEPEPQLELQVEPEPELEQLPDSGCPAPRAEAEDSFL

SEQ ID No: 44 (PTK7)

MGAARGSPARPRRLPLLSVLLLPLGGTQTAIVFIKQPSSQDALQGRALLRCEVE
APGPVHVYWLLDGAPVQDTERFAQGSSLSFAAVDRLQDSGTFQCVARDDVTGE
25 EARSANASFNIKWIEAGPVVLKHPASEAEIQPQTQVTLRCHIDGHPRPTYQWFRDG
TPLSDGQSNHTVSSKERNLTLRPAGPEHSGLYSCCAHS AFGQACSSQNFTLSIADES
FARVVLAPQDVVVAR YEEAMFHCQFSAQPPPSLQWLFEDETPTNRSRPPHLRRAT
VFANGSLLLTQVRPRNAGIYRCIGQGQRGPPILEATLHLAEIEDMPLFEPRVFTAGS
EERVTC LPPKGLPEPSVWWEHAGVRLPTHGRVYQKGHELVLANIAESDAGVYTC
30 HAANLAGQRRQDVNITVATVPSWLKKPQDSQLEEGKPGYLDCLTQATPKPTVVW
YRNQMLISED SRFEVFKNGTLRINSVEVYDGTWYRCMSSTPAGSIEAQARVQVLE
KLKFTPPPQQQCM EFDKEATVPCSATGREKPTIKWERADGSSLP EWVTDNAGTL

HFARVTRDDAGNYTCIASNGPQGQIRAHVQLTVAVFITFKVEPERTTVYQGHTAL
LQCEAQGDPKPLIQWKGKDRILDPTKLGPRMHIFQNGSLVIHDVAPEDSGRYTCIA
GNSCNIKHTEAPLYVVDKPVPEESEGGPSPPPYKMIQTIGLSVGAAVAYIIAVLGLM
FYCKKRCKAKRLQKQPEGEEPEMECLNGGPLQNGQPSABIEEVALTSLGSGPAA
5 TNKRHSTSDKMHFPRSSLQPITTLGKSEFGEVFLAKAQGLEEGVAETLVLVKSLQS
KDEQQQLDFRRELEMFGLNHANVVRLLGLCREAEPHYMVLEYVDLGDLDKQFLR
ISKSKDEKLKSQPLSTKQKVALCTQVALGMEHLSNNRFVHKDLAARNCLVSAQR
QVKVSALGLSKDVYNSEYYHFRQAWVPLRWMSPEAILEGDFSTKSDVWAFGV
MWEVFTHGEMPHGGQADDEVLADLQAGKARLPQPEGCP SKLYRLMQRCWALSP
10 KDRPSFSEIASALGDSTVDSKP

SEQ ID No: 45 (UGCGL1)

MGCKGDASGACAAGALPVTGVCYKMGVLVVLTVLWLFSSVKADSKAITTSLTTK
WFSTPLLEASEFLAEDSQEKFWNFVEASQNGSSDHDGTDYSYYHAILEAAFQFL
15 SPLQQNLFKFCLSLRSYSATIQAFFQIAADEPPPEG CNSFFSVHGKKTCESDTLEAL
LLTASERPKPLLFKGDHRYPSSNPESPVVIFYSEIGSEEF SNFHRQLISKSNAGKINY
VFRHYIFNPRKEPVYLSGYGVELA IKSTEYKAKDDTQVKGTEVNTTVIGENDPIDE
VQGFLFGKLRDLHPDLEGQLKELRKHLVESTNEMAPLKVWQLQDLSFQTAARILA
SPVELALVVMKDLSQNFPTKARAITKTAVSSEL RTEVEENQKYFKGTLGLQPGDS
20 ALFINGLHMDLDTQDIFSLFDVLRNEARVMEGLHRLGIEGLSLHNVLKLNIPSEA
DYAVDIRSPAISWVNNLEVDSRYNSWPSSLQELLRPTFFGVIRQIRKNLHNMFVIV
DPAHETTAELMNTAEMFLSNHIPLRIGFIFVNDSEDVDGMQDAGVAVLRA YNYV
AQEVDDYHAFQTLTHIYNKVRTGEKV KVEHVVS VLEKKYPYVEVNSILGIDSAYD
RNRKEARGYYEQTG VGPLPVVLFNGMPFEREQ LDPDELETITMHKILETTTFFQRA
25 VYLGELPHDQDVVEYIMNQPNVVRINSRILTAERDYLDLTASNFFVDDYARFTI
LDSQGKTA AVANSMNYLTKKGMSSKEIYDDSFIRPVTFWIVGDFDSPSGRQLLYD
AIKHQKSSNNVRISMINNPAKEISYENTQISR AIWAALQTQTSNAAKNFITKMAKE
GAAEALAAGADIAEFSVGGMDFSLFKEVFESSKMDFILSHAVYCRDVLK LKKGQR
AVISNGRIIGPLEDSELFNQDDFHLL ENILKTSGQKIKSHIQQLRVEEDVASDLVMK
30 VDALLSAQPKGDPRIEYQFFEDRHS AIKLRPKEGETYFDVVA VVDPVTRE AQR LAP
LLL VLAQLINMNLRFVMNCQSKLSDMPLKSFYRYVLEPEISFTSDNSFAKGPIAKFL
DMPQSPLFTLNLNTPESWMVESVRTPYDL DNIYLEEVDSVVA AEYELEYLLLEGH

CYDITTGQPPRGLQFTLGTSANPVIVDTIVMANLGYFQLKANPGA WILRLRKGRSE
DIYRIYSHDGTDSPPDADEVVIVLNNFKSKIIKVKVQKKADMVNEDLLSDGTSENE
SGFWDSFKWGF TGQKTEEVKQDKDDIINIFSVASGHLYERFLRIMMLSVLKNTKTP
VKFWFLKNYLSPTFKEFIPYMANEYNFQYELVQYKWPRWLHQQTEKQRIIWGYKI
5 LFLDVLFP L VVDKFLFVDADQIVRTDLKELRDFNLDGAPYGYTPFCDSRREMDGY
RFWKSGYWASHLAGRKYHISALYVVDLKKFRKIAAGDRLRGQYQGLSQDPNSLS
NLDQDLPNNMIHQVPIKSLPQEWLWCETWCDDASKKRAKTIDLCNNPMTKEPKL
EAAVRIVPEWQDYDQEIQLQIRFQKEKETGALYKEKTKEPSREGPQKREEL

10 SEQ ID No: 46 (CtnnB1)

MATQADLMELDMAMEPDRKAAVSHWQQQSYLD SGIHSGATTTAPSLSGKGNPEE
EDVDTSQVLYEWEQGFSQSFTQE QVADIDGQYAMTRAQVR AAMFPETLDEGM
QIPSTQFDAAHPTNVQRLAEP SQMLKHAVVN LINYQDDAELATRAIP ELTKLLNDE
15 DQVVVNKAAVMVHQLSKKEASRHAIMRSPQMVS AIVRTMQNTNDVETARCTAG
TLHNLSHHREGLLAIFKSGGIPALVKMLGSPVDSVLFYA ITTLHNLLLHQEGAKMA
VRLAGGLQKMVALLNKTNVKFLA ITTDCLQILAYGNQESKL IILASGGPQALVNIM
RTYTYEKLLWTTSRVLKVL SVCSSNKPAIVEAGGMQALGLHLTDPSQRLVQNCL
WTLRNLSDAATKQEGMEGLLGTLVQLLGSDDINVTCAAGILSNLTCNNYKNKM
MVCQVGGIEALVRTVLRAGDREDITEPAICALRH LTSRHQEAEMAQNAVRLHYGL
20 PVVVKLLHPPSHWPLIKATVGLIRNLALCPANHAPLREQGAIPRLVQLLVRAHQDT
QRR TSMGGTQQQFVEGVRMEEIVEGCTGALHILARDVHN RIVIRGLNTIPLFVQLL
YSPIENIQRVAAGVLCELAQDKEAAEAIEAEGATA PLTELLHSRNEGVATYAAAVL
FRMSDKPQDYKKRLSVELTSSLFRTEPMAWNETADLGLDIGAQGEPLGYRQDDP
SYRSFHSGGYGQDALGMDPMMEHEMGGHHPGADY PVDGLPDLGHAQDLMDGL
25 PPGDSNQLAWFDTDL

SEQ ID No: 47 (CtnnA1)

MTAVHAGNINFKWDPKSLEIRTLAVERLLEPLVTQVT TLVNTNSKGPSNKKRGRS
KKAHVLAASVEQATENFLEKGD KIAKESQFLKEELVVAVEDVRKQGDLMKAAAG
30 EFADDPCCSSVKRGNMVRAAPALLSAVTRLLILAD MADVYKLLVQLKVVEDGILKL
RNAGNEQDLGNQYKALKPEVDKLNIMAAKRQQELKDVGH RDQMAAARGILQSN
VPILYTASQACLQHPDVAAYKANRD LIYKQLQQA V TGISNAAQATASDDASQHQ

GGGGGELAYALNNFDKQIIVDPLSFSEERFRPSLEERLESIISGAALMADSSCTRDD
RRERIVAECNAVRQACRTCVCSEYMGNAGRKERSDALNSAIDKMTKKTRDLRRQL
RKAVMDHVSDFSLETNVPLLVLIEAAKNGNEKEVKEYAQVFREHANKLIEVANLA
CSISNNEEGVKLVRMSASQLEAGCPQVINAATWALAPKPQSKLAQENMDLFKEQ
5 WEKQVRVLTDVDDITSIDDFLAVSENHILEDVNKCVIALQEKDVGDLDRTAGAI
RGRAARVIHVVTSEMDNYEPGVYTEKVL EATKLLSNTVMPRFTEQVEAAVEALSS
DPAQPMDENEFIDASRLVYDGI RDIRKAVLMIRTPEELDDSD FETEDFDVRSETSVQ
TEDDQLIAGQSARAIMAQLPQEQKAKIREQVASFQEEKSKLDAEVSKWDDSGNDII
VLAKQMCMMEMMTDFTRGKGPLKNTSDVISA AKKIAEAGSRMDKLGRTIRDHC
10 PDSACKQDLLAYLQRIALYCHQLNICKSVKAEVQNLGGELV VSGNCDTCGALQGL
KGWPPPLCLATHWVDSAMSLIQA AKNLMNAV VQTVKASYVASTKYQKSQGMAS
LNLPAVSMKMKAPEKKPLVKREKQDETQTKIKRASQKKHVPVQALSEFKAMDS
I

15 SEQ ID No: 48 (CtnnA2)

MTSATSPIILKWDPKSLEIRTLTVERLLEPLVTQVTTLVNTSNKGPSGKKKGRSKKA
HVLAASVEQATQNFLEKGEQIAKESQDLKEELVAAVEDVRKQGETMRIASSEFAD
DPCSSVKRGTMVRAARALLSAVTRLLILADMADV MRLLSHLKIVEEAEAVKNAT
NEQDLANRFKEFGKKMVKLNYVAARRQQELKDPHCRDEMAAARGALKKNATM
20 LYTASQAFLRHPDVAATRANRDYVFKQVQEAIAGISNAAQATSPTDEAKGHTGIG
ELAAALNEFDNKIILDPMTFSEARFRPSLEERLESIISGAALMADSSCTRDDRRERIV
AECNAVRQALQDLLSEYMNNTGRKEKGDPLNIAIDKMTKKTRDLRRQLRKAVM
DHISDFSLETNVPLLVLIEAAKSGNEKEVKEYAQVFREHANKLVEVANLAC SISNN
EEGVKLVRMAATQIDSLCPQVINAALT LAARPQSKVAQDNMDVFKDQWEKQVR
25 VLTEAVDDITSVDDFLSVSENHILEDVNKCVIALQEGD VDTLDRTAGAIRGRAARV
IHIINAEMENYEAGVYTEKVL EATKLLSETVMPRFAEQVEVAIEALSANVPQPFEE
NEFIDASRLVYDGV RDIRKAVLMIRTPEELEDDSD FEQEDYDVRRGTSVQTEDDQL
IAGQSARAIMAQLPQEEKAKIAEQVEIFHQEKSKLDAEVAKWDDSGNDIIVLAKQ
MCMIMMEMMTDFTRGKGPLKNTSDVINA AKKIAEAGSRMDKLARAVADQCPDSA
30 CKQDLLAYLQRIALYCHQLNICKSVKAEVQNLGGELIVSGTGVQSTFTTFYEVD CD
VIDGGRASQLSTHLPTCAEGAPIGSGSSDSSMLDSATSLIQA AKNLMNAVVLTVKA

SYVASTKYQKVYGTAAVNSPVVSWKMKAPEKKPLVKREKPEEFQTRVRRGSQK
KHISPVQALSEFKAMDSF

SEQ ID No: 49 (CtnnD1)

5 MDDSEVESTASILASVKEQEAQFEKLTRALEEERRHVSAQLERVRVSPQDANPLM
ANGTLTRRHQNGRFVGDADLERQKFSDLKLNGPQDHSLLYSTIPRMQEPGQIVE
TYTEEDPEGAMSVSVSVETSDDGTTRRTETT VKKVVTTRTVQPVAMGPDGLP
VDASSVSNNYIQT LGRDFRKNNGGGPGPYVGQAGTATLPRNFHYPPDGYSRHYE
DGYPGGSDNYGSLSRVTRIEERYRPSMEGYRAPSRQDVYGPQPQVRVGGSSVDLH
10 RFHPEPYGLEDDQRSMGYDDLDYGMMSDYGTARRTGTPSDPRRRLRSYEDMIGE
EVPSDQYYWAPLAQHERGSLASLDSLKGGPPPPNWRQPELPEVIAMLGFRLLDAV
KSNAAYLQHL CYRNDKVKTDVRKLKGIPVLVGLLDHPKKEVHLGACGALKNIS
FGRDQDNKIAIKNCDGVPALVRLLRKARDMDLTEVITGTLWNLSSHDSIKMEIVD
HALHALTDEVIIPHSGWEREPNEDCKPRHIEWESVLTNTAGCLRNVSSERSEARRK
15 LRECDGLVDALIFIVQAEIGQKDSDSL VENCVCLLRNLSYQVHREIPQAERYQEA
APNVANNTGPHAASCFGAKKKGKGGKPIEDPANDTVDFPKRTSPARGYELLFQPEV
VRIYISLLKESKTPAILEASAGAIQNLCAGRWTYGRYRSALRQEKALSAIADLLTN
EHERVVKAASGALRNLAVDARNKELIGKHAIPNLVKNLPGGQQNSSWNFS EDTVI
SILNTINEVIAENLEAAKKLRETQGIEKLVLINKSGNRSEKEVRAAALVLQTIWGYK
20 ELRKPLEKEGWKKSD FQVNLNNASRSQSSH SYDDSTLPLIDRNQKSDKKPDREEIQ
MSNMGSNTKSLDNNYSTPNERGDHNR TLDRSGDLGDMEPLKGTTPLMQDEGQES
LEEELDVLVLDDEGGQVS YPSMQKI

SEQ ID No: 50 (NCadh)

25 MCRIAGALRTLPLLLALLQASVEASGEIALCKTGFPEDVYSAVL SKDVHEGQPLL
NVKFSNCNGKRKVQY ESSEPADFKVDEDGMVYA VRSFPLSSEHAKFLIYAQDKET
QEKWQVAVKLSLKPTLTEESVKESAEEVEEIVFPRQFSKHSGHLQRQKRDWVIPPIN
LPENSRGPF PQELVRIRSDRDKNLSLRYSVTGPGADQPPTGIFIINPISGQLSVTKPLD
REQIARFHLRAHA VDINGNQVENPIDIVINVIDMNDNRPEFLHQVWNGTVPEGSKP
30 GTYVMTVT AIDADDPNALNGMLRYRIVSQAPSTPSPNMFTINNETGDIITVAAGLD
REKVQQYT LIQATDMEGNPTYGLSNTATAVITVTDVNDNPPEFTAMTFYGEVPEN
RVDIIVANLTVTDKDQPHTPAWN AVYRISGGDPTGRFAIQTDPN SNDGLVT VVKPI

DFETNRMFVLTVA AENQVPLAKGIQHPPQSTATVSVTVIDVNENPYFAPNPKIIRQ
EEGLHAGTMLTTFTAQDPDRYMQQNIRYTKLSDPANWLKIDPVNGQITTIAVLDR
ESPNVKNNIYNATFLASDNGIPMSGTGTLQIYLLDINDNAPQVLPQEAETCETPDP
NSINITALDYDIDPNAGPFAFDLPLSPVTIKRNWTTITRLNGDFAQLNLKIKFLEAGIY
5 EVPIITDSGNPPKSNISILRVKVCQCDSDNGDCTDVDRIVGAGLGTGAIILLCIILLI
LVLMFVVWMKRRDKERQAKQLLIDPEDDVRDNILKYDEEGGGEEDQDYDLSQLQ
QPDTVEPDAIKPVGIRMDERPIHAEPQYPVRSAAHPHGDIGDFINEGLKAADNDPT
APPYDSSLVFDYEGSGSTAGSLSSLNSSSSGGEQDYDYLNWGWPRFKKLADMYGG
GDD

10

SEQ ID No:51 (Reelin)

MERSGWARQTFLALLLGATLRARAAAGYYPRFSPFFFLCTHHGELEGDGEQGEV
LISLHIAGNPTYYPGQYHYVTISTSTFFDGLLVTGLYTSTSVQASQSIGGSSAFGFG
IMSDHQFGNQFMCSVVASHVSHLPTTNLSFIWIAPPAGTGCVNFMATATHRGQVIF
15 KDALAQQQLCEQGAPTDVTVHPLAEIHSDSIILRDDFDSYHQLQLNPNIWVECNNC
ETGEQCGAIMHGNAVTFCEPYGPRELITTGLNTTTASVLQFSIGSGSCRFSYSDPSII
VLYAKNNSADWIQLEKIRAPSNVSTIIHILYPEDAKGENVQFQWKQENLRVGEVY
EACWALDNILIINSAHRQVVLEDSDLPVDTGNWLFPPGATVKHSCQSDGNSIYFHG
NEGSEFNFATTRDVDLSTEDIQEQWSEEFESQPTGWDVLGAVIGTECGTIESGLSM
20 VFLKDGERKLCTPSMDTTGYGNLRFYFVMGGICDPGNSHENDIILYAKIEGRKEHI
TLDTLSYSSYKVPSLVSVVINPELQTPATKFCLRQKNHQGHNRNVWAVDFFHVLP
VLPSTMSHMIQFSINLGCCTHQPGENSVSLEFSTNHGRSWSLLHTECLPEICAGPHLP
HSTVYSSSENYSGWNRITPLPNAALTRNTRIRWRQTGPILGNMWAIDNVYIGPSC
KFCSGRGQCTRHGCKCDPGFSGPACEMASQTFPMFISESFGSSRLSSYHNFYSIRGA
25 EVSFGCGVLASGKALVFNKEGRRQLITSFLDSSQSRFLQFTLRLGSKSVLSTCRAPD
QPGEVLLHYSYDNGITWKLLEHYSYLSYHEPRIISVELPGDAKQFGIQFRWWQPY
HSSQREDVWAIDEIIMTSVLFNSISLDFTNLVEVTQSLGFYLGNVQPYCGHDWTLC
FTGDSKLASSMRYVETQSMQIGASYMIQFSLVMGCGQKYTPHMDNQVKLEYSTN
HGLTWHLVQEECLPSMPSCQEFTSASIYHASEFTQWRRVIVLLPQKTWSSATRFR
30 WSQSYYYTAQDEWALDSIYIGQQCPNMCSGHGSCDHGICRCDDQGYQGTECHPEAA
LPSTIMSDFENQNGWESDWQEVIGGEIVKPEQGCQGVISSGSSLYFSKAGKRQLVSW
DLDTSWVDFVQFYIQIGGESASCNKPDSREEGVLLQYSNNGGIQWHLLAEMYFSD

FSKPRFVYLELPAAAKTPCTRFRWWQPVFSGEDYDQWAVDDIILSEKQKQIIPVIN
PTLPQNFYEKPAFDYPMNQMSVWLMLANEGMVKNETFCAATPSAMIFGKSDGDR
FAVTRDLTLKPGYVLQFKLNIGCANQFSSTAPVLLQYSHDAGMSWFLVKEGCYPA
SAGKGCEGNSRELSEPTMYHTGDFEEWTRITVIPRSLASSKTRFRWIQESSSQKNV
5 PPFGLDGVYISEPCPSYCSGHGDCISGVCFCDLGYTAAQGTCSVSNVPHNEMFDRF
EGKLSPLWYKITGAQVGTGCGTLNDGKSLEYFNGPGKREARTVPLDTRNIRLVQFYI
QIGSKTSGITCIKPRTRNEGLIVQYSNDNGILWHLLRELD FMSFLEPQIISIDLPODAK
TPATAFRWWQPQHGHKHAQWALDDVLIGMNDSSQTGFQDKFDGSIDLQANWYRI
QGGQVDIDCLSMDTALIFTENIGKPRYAETWDFHVSASTFLQFEMSMGCSKPFSNS
10 HSVQLQYSLNNGKDWHLVTEECVPPTIGCLHYTESSITYTSERFQNWKRITVYLPLS
TISPRTRFRWIQANYTVGADSWAIDNVVLASGCPWMCSGRGICDAGRCVCDRGFG
GPYCVPVVPLPSILKDDFNGNLHPDLWPEVYGAERGNLNGETIKSGTSLIFKGEGL
RMLISRDLDCTNTMYVQFSLRFLAKSTPERSHSILLQFSISGGITWHLMDIFYFPQIT
NILFINVPLPYTAQTNATRFRLWQPYNNGKKEEIWIVDDFIIDGNNVNNPVMLLDT
15 FDFGPREDNWWFFYPGGNIGLYCPYSSKGAPEEDSAMVFVSNEVGEHSITTRDLNVN
ENTIIQFEINVGCSTDSSSADPVRLEFSRDFGATWHLLLPLCYHSSSHVSSLCSTEHH
PSSTYYAGTMQGWRRREVVFHFGKLHLGCSVRFRWYQGFYPAGSQPVTWAIDNVYI
GPQCEEMCNGQGSCINGTKCICDPGYSGPTCKISTKNPDFLKDDFEGQLES DRFL
MSGGKPSRKCGILSSGNNLFFNEDGLRMLMTRDLDLSHARFVQFFMRLGCGKGVP
20 DPRSQPVLLQYSLNGLLSWSLLQEFLFSNSSNVGRYIALEIPLKARSGSTRLRWWQ
PSENGHFYSPWVIDQILIGGNISGNTVLEDDFTTLD SRKWLLHPGGTKMPVCGSTG
DALVFIEKASTRYVVSTDVAVNEDSFLQIDFAASCSVTDSCYAIELEYSVDLGLSW
HPLVRDCLPTNVECSRYHLQRILVSDTFNKWTRITLPLPPYTRSQATRFRWHQPAP
FDKQQTWAIDNVYIGDGCIDMCSGHGRCIQGNCVCDEQWGGLYCDDPETS LPTQ
25 LKDNFN RAPSSQNWLTVNGGKLSTVCGAVASGMALHFSGGCSRLLVTVDLNLTN
AEFIQFYFMYGCLITPNNRNQGVLL EYSVNGGITWNLLMEIFYDQYSKPGFVNILL
PPDAKEIATRFRWWQPRHDGLDQNDWAIDNV LISGSADQRTVMLDTFSSAPVPQH
ERSPADAGPVGRIAFDMFMEDKTSVNEHWLFHDDCTVERFCDSPDGVMLCGSHD
GREVYAVTHDLTPTEGWIMQFKISVGCKVSEKIAQNQIHVQYSTDFGVSWNYLVP
30 QCLPADPKCSGSVSQPSVFFPTKGWK RITYPLPESLVGNPVRRFRFYQKYSDMQWAI
DNFYLGPGCLDNCRGHGDCLEQCICDPGYSGPNCYLTHTLKTF LKERFDSEEIKP
DLWMSLEGGSTCTECGILAEDTALYFGGSTVRQAVTQDLDLRGAKFLQYWGRIGS

ENNMTSCHRPICRKEGVLLDYSTDGGITWTLLHEMDYQKYISVRHDYILLPEDALT
NTTRLRWQPFVISNGIVVSGVERAQWALDNILIGGAËINPSQLVDTFDDEGTSHE
ENWSFYFNAVVRTAGFCGNPSFHLYWPNKKKDKTHNALSSRELIIQPGYMMQFKIV
VGCEATSCGDLHSVMLEYTKDARSDSWQLVQTQCLPSSSNSIGCSPFQFHEATIYN
5 SVNSSSWKRITIQLPDHVSSSATQFRWIKGEETEKQSWAIDHVIYIGEACPKLCSG
HGYCTTGAICICDESFQGDDCSVFSDLPYIKDNFESARVTEANWETIQGGVIGSG
CGQLAPYAHGDSL YFNGCQIRQAATKPLDLTRASKIMFVLQIGSMSQTDSCNSDLS
GPHAVDKAVLLQYSVNNGITWHVIAQHQPDKFTQAQRVSYNVPLEARMKGVLLR
WWQPRHNGTGHDQWALDHVEVVLVSTRKQNYMMNFSRQHGLRHFYNRRRRSL
10 RRY P

SEQ ID No:52 (Sortilin-related receptor)

MATRSSRRESRLPFLFTLVALLPPGALCEVWTQRLHGGSAPLPQDRGFLVVQGD
RELRLWARGDARGASRADEKPLRRKRS AALQPEPIKVYGVSLNDSHNQMVVH
15 WAGEKSNVIVALARDSLALARPKSSDVVYSYDYGKSFKKISDKLNFGLGNRSEAV
IAQFYHSPADNKRYIFADAYAQYLWITFDFCNTLQGF SIPFRAADLLLHSKASNLLL
GFDRSHPNKQLWKSDDFGQTWIMIQEHVKSFSWGIDPYDKPNTIYIERHEPSGYST
VFRSTDFQSRNQEVILEEVRDFQLRDKYMFATKVVHLLGSEQQSSVQLWVSFG
RKPMRAAQFVTRHPINEYYIADASEDQVFVCVSHSNRTNLYISEAEG LKFSLSLE
20 NVLYYSPGGAGSDTLVRYFANEFPADFHRVEGLQGVIATLINGSMNEENMRSVI
TFDKGGTWEFLQAPAFTGYGEKINCELSQGCSLHLAQRLSQLNLQLRRMPILSKE
SAPGLIATGSVGKNLASKTNVYISSAGARWREALPGPHYTTWGDHGGIITAIAQ
GMETNELKYSTNEGETWKTFIFSEKPVFVYGLLTEPGEKSTVFTIFGSNKENVHSW
LILQVNATDALGVPCTENDYKLWSPSDERGNECLLGHKTVFKRRTPHATCFNGED
25 FDRPVVVSNCSTREDYECDFGFKMSEDLSLEVCPDPEFSGKSYSPPVPCPVGST
YRRTRGYRKISGDTCSGGDVEARLEGELVPCPLAEENEFILYAVRKSIYRYDLASG
ATEQLPLTGLRAAVALDFDYEHNCLYWSDLALDVIQRLCLNGSTGQEVINSGLT
VEALAFEPLSQLLYWVDAGFKKIEVANPDGDFRLTIVNSSVLDRPRALVLVPQEGV
MFWTDWGD LKPGIYRSNMDGSAAYHLVSEDVKWPNGISVDDQWYWTDAYLEC
30 IERITFSGQQRSVILDNLHPYAJAVFKNEIYWDDWSQLSIFRASKYSGSQMEILAN
QLTGLMDMKIFYK GKNTGSNACVPRPCSLLCLPKANNSRSCRCPEDVSSSVLPSG
DLMCDCPQGYQLKNNTCVKEENTCLRNQYRCSNGNCINSIWWCDFDND CGDMS

DERNCPTTICDLDTQFRCQESGTCIPLSYKCDLEDDCGDNSDESHCEMHQCRSDEY
NCSSGMCIRSSWVCDGDNDCRDWSDEANCTAIYHTCEASNFCRNGHCIPQRWA
CDGDTDCQDGSDEDPVNCEKKCNGFRCPNGTCIPSSKHCDGLRDCSDGSDEQHCE
PLCTHFMDFVCKNRQQCLFHSMVCDGIIQCRDGSDEDAAFAGCSQDPEFHKVCDE
5 FGFQCQNGVCISLIWKCDGMDDCGDYSDAENCENPTEAPNCSRYPQFRCENGHCI
PNRWKCDREND CGDWSDEKDCGDSHILPFSTPGPSTCLPNYYRCSSGTCVMDTW
VCDGYRDCADGSDEEACPLLANTAASTPTQLGRCDRFEFECHQPKTCIPNWKRC
DGHQDCQDGRDEANCPTHSTLTCTMSREFQCEDGEACIVLSERCDGFLDCSDESDE
KACSELT VYKVQNLQWTADFSGDVTLTWMRPKKMPSASC VYNVYYRVVGESI
10 WKTLETHSNKTNVTLKVLKPDTTYQVKVQVQCLSKAHNTNDFVTLRTPEGLPDA
PRNLQLSLPREAEGVIVGHWAPPIHTHGLIREYIVEYSRSGSKMWASQRAASNFTI
KNLLVNTLYTVRVAAVTSRGIGNWSDSKSITTIKGVIPPPDIHIDSYGENYLSFTLT
MESDIKVNGYVYNLFWAFDTHKQERRTLNFRGSILSHKVGNLTAHTSYEISAWAK
TDLGDSPLAFEHVMTRGVRPPAPSLKAKAINQTAVECTWTGPRNVVYGIFYATSF
15 LDLYRNP KSLTTS LHNKT VIVSKDEQYLFLVRVVVPYQGPSSDYVVVKMIPDSRLP
PRHLHVHTGKTSVVIKWESPYDSPDQDLLYAIAVKDLIRKTDRSYKVKS RNSTV
EYTLN KLEPGGKYHII VQLGNMSKDSSIKITTVSLSAPDALKIITENDHVLLFWKSL
ALKEKHFNESRGYEIHMFD SAMNITAYLGNTTDNFFKISNLKMGHNYTFTVQARC
LFGNQICGEPAILLYDELGSGADASATQAARSTDVAAVVVPILFLILLSLGVGFAIL
20 YTKHRRLQSSFTAFANSHYSSRLGSAIFSSGDDLGEDDEDAPMITGFSDDVPMVIA

SEQ ID No:53 (18 kDa microsomal signal peptidase subunit)

MLSLDFLDDVRRMNKRQLYYQVLNFGMIVSSALMIWKGLMVTGSESPIVVVL SG
SMEPAFHRGDLFLTNRVEDPIRVGEIVVFRIEGREIPVHRVLKIH EKQNGHIKFLT
25 KGDNNAVDDRGLYKQGQHWLEKKDVVGRARGFVPYIGIVTILMNDYPKFKYAV
LFLGLFVLVHRE

SEQ ID No: 54 (CLGN)

HLPKQQRGGVCLGVKSKWQPKLRTGREKIINMHFQAFWLCLGLLFISINAEFMDD
30 DVETEDFEENSEEIDVNESELSSEIKYKTPQPIGEVYFAETFD SGRLAGWVLSKAKK
DDMDEEISIDGRWEIEELKENQVPGDRGLVLKSRAKHHAISAVLAKPFIFADKPLI
VQYEVNFQDGIDCGGAYIKLLADTDDLILENFYDKTSYIIMFGPDKCGEDYKLHFIF

RHKHPKTGVFEEKHAKPPDVDLKKFFTDRKTHLYTLVMNPDDTFEVLVDQTVVN
KGSLLLEDVVPPIKPPKEIEDPNDKKPEEWDERAKIPDPSAVKPEDWDESEPAQIEDS
SVVKPAGWLDDEPKFIPDPNAEKPDWDNEDTDGEWEAPQILNPACRIGCGEWKPP
MIDNPKYKGVWRPPLVDNPNYQGIWSPRKIPNDYFEDDHPFLLTSFSALGLELWS
5 MTSDIYFDNFICSEKEVADHWAADGWRWKIMIANANKPGVLKQLMAAAEGHP
WLWLIYLVTAGVPIALITSFCWPRKVKKKHKDTEYKKT DICIPQTKGVLEQEEKEE
KAALEKPMDL EEEKKQNDGEMLEKEEESEPEEKSEEEIEIEGQEE SNQSNKSGSED
EMKEADESTGSGDGPIKSVRKRRVRKD

10 SEQ ID No:55 (ECSIT)

MSWVQATLLARGLCRAWGGTCGAALTGTSISQVPRRLPRGLHCSAAHSSEQSL
VPSPPEPRQRPTKALVPFEDLFGQAPGGERDKASFLQTVQKFAEHSVRKRGHIDFIY
LALRKMREYGVERDLAVYNQLLNIFPKEVFRPNIIQRIFVHYPRQCEGIAVLEQ
MENHGVMPNKETEFLLIQIFGRKSYPMKLKVLRLKLWFPRFMNVNPFVPRDLPQD
15 PVELAMFGLRHMEPDLSARVTIYQVPLPKDSTGAADPPQPHIVGIQSPDQQAALAR
HNPAPRVFVEGPFSLWLRNKC VYYHILRADLLPPEEREVEETPEEWNLYYPMQLD
LEYVRSGWDNYEFDINEVEEGPVFAMCMAGAHDQATMAKWIQGLQETNPTLAQI
PVVFRLAGSTRELQTSSAGLEEPPLPEDHQEEDDNLQRQQQGQS

20 SEQ ID No:56 (FLJ20342)

MPSASCDTLLDDIEDIVSQEDSKPQDRHFVRKDVVPKVRRRNTQKYLQEEENSPPS
DSTIPGIQKIWIRTWGCSHNNSDGEYMAQQLAAYGYKITENASDADLWLLNSCTV
KNPAEDHFRNSIKKAQEENKKIVLAGCVPQAQPRQDYLKGLSIIGVQQIDRVVEVV
EETIKGHSVRLLGQKKDNGRRLGGARLDLPKIRKNPLIEIISISTGCLNACTYCKTK
25 HARGNLASYPIDELVDRAKQSFQEGVCEIWLTS EDTGAYGRDIGTNLPTLLWKLV
EVIPEGAMLRLGMTNPPYILEHLEEMAKILNHPRVYAFLHIPVQSASDSVLMEMKR
EYCVADFKRVVDLKEKVPGITIATDIICGFPGETDQDFQETVKLVEEYKFPSLFN
QFYPRPGTPAAKMEQVPAQVKKQRTKDLSRVFHSYSPYDHKIGERQQVLVTEESF
DSKFYVAHNQFYEQVLVPKNPAFMGKMVEVDIYESGKHFMKGQPVSDAKVYTPS
30 ISKPLAKGEVSGLT KDFRNGLGNQLSSGSHTSAASQCDSASSRMVLPMPRLHQDC
ALRMSVGLALLGLLFAFFVKVYN

SEQ ID No:57 (KIAA0090)

MAAEWASRFWLWATLLIPAAAVYEDQVGKFDWRQQYVGKVKFASLEFSPGSKK
LVVATEKNVIAALNSRTGEILWRHVDKGTAECAVDAMLLHGQDVITVSNGGRIM
RSWETNIGGLNWEITLDSGSFQALGLVGLQESVRYIAVLKKTTLALHHLSSGHLK
5 WVEHLPESDSIHYQMVSYSYSGSVVWALGVVPFSHVNIIVKFNVEDGEIVQQVRVS
TPWLQHLSGACGVVDEAVLVCPDPSSRSLQTLALETEWELRQIPLQSLDLEFGSGF
QPRVLPTQPNPVDASRAQFFLHLSPSHYALLQYHYGTLSLLKNFPQTALVSFATTG
EKTVAAVMACRNEVQKSSSSEDGSMGSFSEKSSSKDSLACFNQTYTINLYLVETG
RRLDTTTTFSLEQSGTRPERLYIQVFLKKDDSVGYRALVQTEDHLLLFLQQLAGK
10 VVLWSREESLAEVVCLEMVDLPLTGAQAELEGEFGKKADGLLGMFLKRLSSQLIL
LQAWTSHLWKMFDYDARKPRSQIKNEINIDTLARDEFNLQKMMVMVTASGKLFGI
ESSSGTILWKQYLPNVKPDSSFKLMVQRTTAHFPHPPQCTLLVKDKESGMSSLYVF
NPIFGKWSQVAPPVLKRPILQSLLLPVMDQDYAKVLLIDDEYKVTAFPATRNVLK
QLHELAPSIFFYLVD AEQGRLCGYRLRKDLTTELSWELTIPPEVQRIVKVKGKRSSE
15 HVHSQGRVMGDRSVLYKSLNPNLLAVVTESTDAHHERTFIGIFLIDGVTGRIIHSSV
QKKAKGPVHIVHSENWVVYQYWNTKARRNEFTVLELEYEGTEQYNATAFSSSLDRP
QLPQVLQQSYIFPSSISAMEATITERGITSRHLLIGLPSGAILSLPKALLDPRRPEIPTE
QSREENLIPYSPDVQIHAERFINYNQTVSRMRGIYTAPSGLESTCLVVAYGLDIYQT
RVYPSKQFDVLKDDYDYVLISSVLFLVGFATMITKRLAQVKLLNRAWR

20

SEQ ID No:58 (NICE-3)

MASGSNWLSGVNVVLVMA YGSLVFVLLFIFVKRQIMRFAMKSRRGPHVPVGHNA
PKDLKEEIDIRLSRVQDIKYEPQLLADDDARLLQLETQGNQSCYNYLYRMKALDAI
RTSEIPFHSEGRHPRSLMGKNFRSYLLDLRNTSTPFKGVKALIDTLLDGYETARY
25 GTGVFGQNEYLR YQEALSELATAVKARIGSSQRHHQSAAKDLTQSPEVSPTTIQVT
YLPSSQKSKRAKHFL ELKSFKDNYNTLESTL

SEQ ID No: 59 (CK2B)

MSSSEEVSWISWFCGLRGNEFFCEVDEDYIQDKFNLTGLNEQVPHYRQALDMILD
30 LEPDEELEDNPNQSDLIEQA AEMLYGLIHARYILTNRGIAQM LEKYQQGDFGYCPR
VYCENQPMPLPIGLSDIPGEAMVKLYCPKCMDVYTPKSSRHHHTDGAYFGTGFPH
MLFMVHPEYRPKR PANQFVPRLYGFKIHPMAYQLQLQAASNFKSPVKTIR

SEQ ID No: 60 (PTP LOC114971)

MAATALLEAGLARVLFYPTLLYTLFRGKVPGRAHRD WYHRIDPTVLLGALPLRSL
TRQLVQDENVRGVITMNEEYETRFLCNSSQEWKRLGVEQLRLSTVDMTGIP TLDN
5 LQKGVQFALKYQSLGQCVYVHCKAGRSRSATMVAA YLIQVHKWSPEEAVRAIAK
IRSYHIRPGQLDVLKEFHKQITARATKDGT FVISKT

SEQ ID No: 61 (STT3)

MTKFGFLRLSYEKQDTLLKLLLSMAAVLSFSTR LFAVLR FESVIHEFDPYFNYRTT
10 RFLAEEGFYKFHNWFDDRAWYPLGRIIGGTIYPGLMITSAAIYHVLHFFHITIDIRN
VCVFLAPLFSSTTIVTYHLTKELKDAGAGLLAAAMIAV VPGYISRSVAGSYDNEG
IAIFCMLLTYYMWIKAVKTGSICWAAKCALAYFYMVSSWGGYVFLNLIPLHVLV
LMLTGRFSHRIYVAYCTVYCLGTILSMQISFVGFPVLSSEHMAAFGVFGLCQIHA
FVDYLRSKLNPPQQFEVLFRSVISLVGVLLTVGALLMLTGKISPWTGRFYSLLDPS
15 YAKNNIPIASVSEHQPTTWSSYYFDLQLLVFMFPVGLYYCFSNLS DARIFIIMYGV
TSMYFSAVMVRLMLVLAPVMCILSGIGVSQVLSTYMKNLDISRPDKKSKKQQDST
YPIKNEVASGMILVMAFFLITYTFHSTWVTSEAYSSPSIVLSARGGDGSRIFDDFRE
AYYWLRHNTPEDAKVMSWWDYGYQITAMANRTILVDNNTWNNTHISRVGQAM
ASTEELKAYEIMRELDVSYVLVIFGGLTGYSSDDINKFLWMVRIGGSTDTGKH IKEN
20 DYYTPTGEFRVDREGSPVLLNCLMYKMCYYRFGQVYTEAKRPPGFDRVRNAEIG
NKDFELDVLEEA YTTEHWLVRIYKVKDLDNRGLSRT

SEQ ID No: 62 (NicAChRa3)

MGSGPLSLPLALSPRLLLLLLLLL SLLPVARASEAEHRLFERLFEDYNEIRPVANVSD
25 PVIHFEVSMSQLVKVDEVNQIMETNLWLKQIWNDYKLKWNPSDYGGAEFMRVP
AQKIWKPDIVLYNNAVGD FQVDDKTKALLKYTGEVTWIPPAIFKSSCKIDVTYFPF
DYQNCTMKFGSWSYDKAKIDLVLIGSSMNLKDYWESGEWAIIKAPGYKHDIKYN
CCEEIYPDITYSLYIRRLPLFY TINLIIPCLLISFLT VLVFYLPSCGKVTLCISVLLSL
TVFLLVITETIPSTSLVIPLIGEYLLFTMIFVTL SIVITVFVLNVHYRTPTTHTMPSWV
30 KTVFLNLLPRVMFMTRPTSNEGNAQKPRPLYGAELSNLNCFSRAESKGCKEGYPC
QDGMCGYCHHRIKISNFSANLTRSSSESVD AVL SLSALSPEIKEAIQSVKYIAEN
MKAQNEAKEEQKAQEIQQLKRKEKSTETSDQEPGL

SEQ ID No: 63 (SLC4A2)

MSSAPRRPAKGADSFCTPEPESLGPGTGPFPQEEDLHRTLGVVERFEEILQEAGSR
GGEEPGRSYGEEDFEYHRQSSHHHHPLSTHLPPDARRRKTPQGPGRKPRRRPGAS
5 PTGETPTIEEGEEDDEASEAEGARALTQPSPVSTPSSVQFFLREDDSAADRKAERTS
PSSPAPLPHQEATPRASKGAQAGTQVEEAEEAVAVASGTAGGDDGGASGRPLPK
AQPGRHSYNLQERRRIGSMTGAEQALLPRVPTDEIEAQTLATADLDLMKSHRFED
VPGVRRHLVRKNAKGSTQSGREGREPPTPRARPRAPHKPHEVFVELNELLLDKN
QEPQWRETARWIKFEEDVEEETERWGKPHVASLSFRSLELRRTLAHGAVLLDLD
10 QQTLPGVAHQVVEQMVISDQIKAEDRANVLRALLKHSHPSEKDFSFPRNISAGS
LGSLLGHHHGQGAESDPHVTEPLMGGVPETRLVERERDVPPPAPPAGITRSKSKH
ELKLEKIPENAEATVVLVGCVEFLSRPTMAFVRLREAVELDAVLEVPVPVRFLFL
LLGPSSANMDYHEIGRSISTLMSDKQFHEAAYLADEREDLLTAINAFLDCSVVLPP
SEVQGEELLRSVAHFQRQMLKKREEQGRLPTGAGLEPKSAQDKALLQMVEAAG
15 AAEDDPLRRTGRPFGLIRDVRRRYPHYLSDFRDALDPQCLAAVIFTYFAALSPAIT
FGLLGEKTQDLIGVSELMSTALQGVVFCLLGAQPLLVIGFSGPLLVFEEAFFSFCS
SNHLEYLVGRVWIGFWLVFLALLMVALEGSFLVRFVSRFTQEIFAFLISLIFYETFY
KLVKIFQEHLHGCSASNSSEVDGGENMTWAGARPTLGPGRNSLAGQSGQGKPR
GQPNTALLSLVLMAGTFFIAFFLRKFKNRFFPGRIRRVIGDFGVPIAILMVLVDYS
20 IEDTYTQKLSVPSGFSVTAPEKRGWVINPLGEKSPFPVWMMVASLLPAILVFILIFM
ETQITTLISKKERMLQKGSFHLDLLLIVAMGGICALFGLPWLAATVRSVTHAN
ALTVMSKAVAPGDKPKIQEVKEQRTGLLVALLVGLSIVIGDLLRQIPLAVLFGIFL
YMGVTSNLGIQFYERLHLLLMPPKHHPDVTYVKKVRTLRMHLFTALQLLCLALL
WAVMSTAASLAFPFILITVPLRMVVLTRIFTDREMKCLDANEAEVFDEREGVDE
25 YNEMPMPV

SEQ ID No: 64 (HIFPH3/EGLN3)

MGKGGNQGEAAEREVSVPFWSWEEIQKHNLRTDRWLVIDRKVYNITKWSIQHP
GGQRVIGHYAGEDATDAFRAHPDLEFVGKFLKPLLIGELAPEEPSQDHGKNSKIT
30 EDFRALRKTAEDMNLFKTNHVFFLLLLAHIIALESIAWFTVIFYFGNGWIPTLITAFV
LATSQAQAGWLQHDYGHLSVYRKPKWNHLVHKFVIGHLKGASANWWNHRHFQ
HHAKPNIFHKDPDVNMLHVFVLGEWQPIEYGKKKLKYL PYNHQHEYFFLIGPPLLI

PMYFQYQIIMTMIVHKNWVDLAWAVSYYIRFFITYIPFYGILGALLFLNFIRFLESH
WFWVWTQMNHIVMEIDQEAYRDWFSSQLTATCNVEQSFFNDWFSGHLNFQIEHH
LFPTMPRHNHLHKIAPLVKSLCAKHGIEYQEKPLLRALLDIIRSLKKSGKLWLDAYL
HK

5

SEQ ID No:65 (STX10)

MSLEDPPFFVVRGEVQKAVNTARGLYQRWCELLQESAAVGREELDWTNENLNG
RSIEWDLEDLEETIGIVEANPGKFKLPAGDLQERKVFVERMREAVQEMKDHMVSP
TAVAFLENNREILAGKPAAQKSPDLLDASAVSATSRYTEEQQATQQLIMDEQDQ
10 QLEMVSGSIQVLKHMSGRVGEELDEQGIMLDFAQEMDHTQSRMDGVLRKLAK
VSHMTSDRRQWCAIAVLVGVLLLVLILLFSL

SEQ ID No:66 (Presenilin-2)

MLTFMASDSEEEVCDERTSLMSAESPTPRSCQEGRQGPEDGENTAQWRSQENEE
15 GEEDPDRYVCSGVPGRPPGLEEELTLKYGAHVIMLFVPVTLCMIVVATIKSVRF
YTEKNGQLIYTPFTEDTPSVGQRLNLSVLNTLMISVIVVMTIFLVVLYKYRCYKFI
HGWLMSSLMMLLFLFTYIYLGEVLKTYNVAMDYPTLLLTVWNFGAVGMVCIHWK
GPLVLQQAYLIMISALMALVFIKYLPEWSAWVILGAISVYDLVAVLCPKGPLRML
VETAQERNEPIFPALYSSAMVWTVGMAKLDPSSQGALQLPYDPEMEEDSYDSFG
20 EPSYPEVFEPPLTGYPGEELEEEERGVKLGLGDFIFYSVLVGKAAATGSGDWNTT
LACFVAILIGLCLTLLLLAVFKKALPALPISITFGLIFYFSTDNLVRPFMDTLASHQL
YI

SEQ ID No:67 (Wolframin)

25 MDSNTAPLGPSCPQPPAPQPQARSRLNATASLEQERSERPRAPGPQAGPGPGVRD
AAAPAEPPAQHTRSRRERADGTGPTKGDMEIPFEEVLERAKAGDPKAQTEVGKHY
LQLAGDTDEELNSCTAVDWLVLAQKQRREAVKLLRRCLADRRGITSENEREVR
QLSSETDLERA VRKAALVMYWKLNPKKKKQVAVAELENVGVNEHDGGAQPG
PVPKSLQKQRRMLERLVSSSESKNYIALDDFVEITKKYAKGVIPSSLFLQDDEDDDE
30 LAGKSPEDLPLRLKVVKYPLHAIMEIKEYLIDMASRAGMHWLSTIIPTHHINALIFF
FIISNLTIDFFAFFIPLVIFYLSFISMVICTLKVFQDSKAWENFRTLTDLLLRFEPNLDV
EQAEVNFGWNHLEPYAHFLLSVFFVIFSFIASKDCIPCSELA VITGFFT VTSYLSLS

THAEPYTRRALATEVTAGLLSLLPSMPLNWPYLKVLGQTFITVPVGHLLVVLNVSV
PCLLYVYLLYLFFRMAQLRNFKGTICYLVPYLVCFMWCELSVVILLESTGLGLLR
ASIGYFLFLFALPILVAGLALVGVLQFARWFTSLELTkiaVTVAVCSVPLLLRWWT
KASFSVVG MVKSLTRSSMVKLILVWLTAIVLFCWFYVYRSEGMKVYNSTLTWQQ
5 YGALCGPRAWKETNMARTQILCSHLEGHRVTWTGRFKYVRVTDIDNSAESAINM
LPFFIGDWMRCLYGEAYPACSPGNTSTAEEELCRLKLLAKHPCHIKKFDRYKFEIT
VGMPFSSGADGSRGREEDDVTKDIVLRASSEFKSVLLSLRQGS LIEFSTILEGRLGSK
WPVFELKAISCLNCMAQLSPTRRHVKIEHDWRSTVHGAVKFAFDFFFFPFLSAA

10 SEQ ID No:68 (BACE1)

MAQALPWLLLWMGAGVLP AHGTQH GIRLPLRSGLGGA PLGLRLPRETDEEPEEPG
RRGSFVEMVDNLRGKSGQGYVEMTVGSPPQTLN ILVDTGSSNFAVGAAPHPFLH
RYYQRQLSSTYRDLRKGVYVPYTQGWEGELGTDLV SIPHGPNVTVRANIAAITE
SDKFFINGSNWEGILGLAYAEIARPDDSLPFFDSL VKQTHVPNLFSLQLCGAGFPL
15 NQSEVLASVGGSMIIGGIDHS LYTGSLWYTPIRREWYVEIIVRVEINGQDLKMDC
KEYNYDKSIVDSGTTNLR LPKKVFEAAVKSIIAASSTEKFPDGFWLGEQLVCWQA
GTPPWNI FVISLYLMGEVTNQSFRITLPQQYL RPVEDVATSQDDCYKFAISQSST
GTVMGAVIMEGFYVVFDRARKRIGFAVSACHVHDEFRTAAVEGPFVTLDMEDCG
YNIPQTDESTLMTIAYVMAAICALFMLPLCLMVCQWRCLRCLRQQHDDFADDISL
20 LK

SEQ ID No:69 (FLJ30668)

MELHYLAKKSNQADLCDARDWSSRGLPGDQADTAATRAALCCQKQCASTPRAT
EMEGSKLSSSPASPSSSLQNSTLQPD AFPPGLLHSGNNQITAERKVCNCCSQELET
25 FTYVDKNINLEQRNRSSPSAKGHNHPGELGWENPNEWSQEAAISLISEEEDDTSS
ATSSGKSIDYGFISAILFLVTGILLVIISYTVPREVTVPNTVAAREMERLEKESARLG
AHLDRCVIAGLCLLTLGGVILSCLLMMSMWKGELYRRNRFASSKESAKLYGSFNF
RMKTSTNENTLELSLVEEDALAVQS

30 SEQ ID No:70 (BSCv protein)

MSEADGLRQRRPLRPQVVTDDD GQAPEAKDGSSFSGRVFRVTFMLAVSLTVPLL
GAMMLLES PIDPQPLSFKEPPLLGV LHPNTKLRQAERLFENQLVGPESIAHIGDVM

FTGTADGRVVKLENGEIETIARFGSGPCKTRDDEPVCGRPLGIRAGPNGTLFVADA
YKGLFEVNPWKREVKLLLSSETPIEGKNMSFVNDLTVTQDGRKIYFTDSSSKWQR
RDYLLVMEGTDDGRLLLEYDTVTREVKVLLDQLRFPNGVQLSPAEDFVLVAETT
MARIRRVYVSGLMKGGADLFVENMPGFDPNIRPSSSGGYWVGMSTIRPNPGFSML
5 DFLSERPWIKRMIFKLFSEQETVMKFVPRYSLVLELSDSGAFRRSLHDPDGLVATYIS
EVHEHDGHLYLGSFRSPFLCRLSLQAV

SEQ ID No:71 (FLJ39249)

MAPRPLGPLVLALGGAAAVLGSVLFILWKTYFGRGRERRWDRGEAWWGAEAAAR
10 LPEWDEWDPEDEEDEEPALEEELEQREVLVLGLDGAGKSTFLRVLSGKPPLEGHPT
WGFNSVRLPTKDFEVDLLEIGGSQNLRFYWKEFVSEVDVLVFFVDSADRLRLPWA
RQELHKLLDKDPDLPVVVVANKQDLSEAMSMGELQRELGLQAIDNQREVFLAA
SIAPAGPTFEETPGTVHIWKLLLELLS

15 SEQ ID No:72 (Cgl-13)

MSFLIDSSIMITSQILFFGFGWLFFMRQLFKDYEIRQYVVQVIFSVTFAFSCTMFELII
FEILGVLNSSSRYPFWKMNLCVILLILVFMVPFYIGYFIVSNIRLLHKQRLLFSCLLW
LTFMYFFWKLGDPPILSPKHGILSIEQLISRVGIVGVTLMALLSGFGAVNCPYTYM
SYFLRNVTDTDILALERRLLQTMDMISSKKKRMAMARRTMFQKGEVHNKPSGFW
20 GMIKSVTTSASGSENLTIIQQEVDALIELSRQLFLETADLYATKERIEYSKTFKGKY
FNFLGYFFSIYCVWKIFMATINIVFDRVGKTDVPTRGIEITVNYLGIQFDVKFWSQHI
SFILVGIIIVTSIRGLLITLTKFFYAISSSKSSNVIVLLLAQIMGMYFVSSVLLIRMSMP
LEYRTITEVLGELQFNFYHRWFDVIFLVSALSSILFLYLAHKQAPEKQMAP

25 SEQ ID No:73 (ITCH)

MSDSGSQLGSMGSLTMKSQIQITVISAKLKENKKNWFGPSPYVEVTVDGQSKKTE
KCNNTNSPKWKQPLTVIVTPVSKLHFRVWSHQTLKSDVLLGTAALDIYETLKSNN
MKLEEVVVTLLQLGGDKETETIGDLSICLDGLQLESEVVNTGETTCSENGVSCLP
RLECNSAISAHCNLCPLGLSDSPISASRVAGFTGASQNDGSRSKDETRVSTNGSD
30 DPEDAGAGENRRVSGNNSPSLSNGGFKPSRPPRPSRPPPTPRRPASVNGSPSATSE
SDGSSTGSLPPTNTNTNTSEGATSGLIPLTISGGSGPRPLNPVTQAPLPPGWEQRVD
QHGRVYYVDHVEKRTTWDRPEPLPPGWERRVDNMGRIYYVDHFTRTTTWQRPT

LESVRNYEQWQLQRSQLQGAMQQFNQRFTYGNQDLFATSQSKEFDPLGPLPPGWE
KRTDSNGRVYFVNHNTTRITQWEDPRSQGQLNEKPLPEGWEMRFTVDGIPYFVDH
NRRTTTYIDPRTGKSALDNGPQIA YVRDFKAKVQYFRFWCQQLAMPQHITVTR
KTLFEDSFQQIMSFSPQDLRRRLWVIFPGEEGLDYGGVAREWFFLLSHEVLNPMYC
5 LFEYAGKDNYCLQINPASYINPDHLKYFRFIGRFIAMALFHGKFIDTGFSLPFYKRIL
NKPVGKLDLESIDPEFYNSLIWVKENNIEECDLEMYFSVDKEILGEIKSHDLKPNGG
NILVTEENKEEYIRMVAEWRLSRGVVEEQTAFFEGFNEILPQQYLQYFDAKELEVL
LCGMQEIDLNDWQRHAIYRHYARTSKQIMWFWQFVKEIDNEKRMRLQLQFVTGTC
RLPVGGFADLMGSNGPQKFCIEKVGKENWLPRSHTCFNRLDLPPYKS YEQLKEKL
10 LFAIETEFGFQE

SEQ ID No:74 (Casein kinase III beta chain)

MSSSEEVSWISWFCGLRGNEFFCEVDEDYIQDKFNLTGLNEQVPHYRQALDMILD
LEPDEELEDNPNQSDLIEQAAEMLYGLIHARYILTNRGIAQMLEKYQQGDFGYCPR
15 VYCENQPMPLPIGLSDIPGEAMVKLYCPKCMDVYTPKSSRHHHTDGA YFGTGFPH
MLFMVHPEYRPKRPANQFVPRLYGFKIHPMAYQLQLQAASNFKSPVKTR

SEQ ID No:75 (Cathepsin B)

MWQLWASLCCLLVLANARSRPSFHPVSDLVNYVNKRNTTWQAGHNFYNVDMS
20 YLKRLCGTFLGGPKPPQRMFTEDLKLPA SFDAREQWPQCPTIKEIRDQGSCGSCW
AFGA VE AISDRICHTNAHVSVEVSAEDLLTCCGSMCGDGCNGGYPAEAWNFWTR
KGLVSGGLYESHVGC RPYSIPPCEHHVNGSRPPCTGEGDTPKCSKICEPGYSPTYK
QDKHYGYNSYSVSNSEKDIMAEIYKNGPVEGAFSVYSDFLLYKSGVYQHVTGEM
MGGHAIRILGWGVENGTPYWL VANSWNTDWGDNGFFKILRGQDHC GIESEVVAG
25 IPRTDQYWEKI

SEQ ID No:76 (Delta-6 fatt acid desaturase)

MGKGGNQGEGAAEREVSVP TFSWEEIQKHNLRTDRWLVIDRKVYNITKWSIQHP
GGQRVIGHYAGEDATDAFRA FHPDLEFVGKFLKPLLIGELAPEEPSQDHGKNSKIT
30 EDFRALRKTAEDMNLFKTNHVFFLLLLAHIIALESIAWFTV FYFGNGWIPTLITAFV
LATSQAQAGWLQHDYGHLSVYRKPKWNHLVHKFVIGHLKGASANWWNHRHFQ
HHAKPNIFHKDPDVNMLHV FVLGEWQPIEYGKKKLKYL PYNHQHEYFFLIGPPLLI

PMYFQYQIIMTMIVHKNWVDLAWAVSYIRFFITYIPFYGILGALLFLNFIRFLESH
WFVWVTQMNHIVMEIDQEA YRDWFSSQLTATCNVEQSFNDWFSGHLNFQIEHH
LFPTMPRHNHLHKIAPLVKSLCAKHGIEYQEKPLL RALLDIIRSLKKSGKLWLDAYL
HK

5

SEQ ID No:77 (Nogo-A)

MEDLDQSPLVSSSDSPRPQPAFKYQFVREPEDEEEEEEEEEDEDEDLEELEVLER
KPAAGLSAAPVPTAPAAGAPLMDFGNDFVPPAPRGPLPAAPPVAPERQPSWDPS
VSSTVPAPSPLSAAAVSPSKLPEDDEPPARPPPPPPASVSPQAEPVWTPAPAPAAPP
10 STPAAPKRRGSSGSVDETLFALPAASEPVIRSSAENMDLKEQPGNTISAGQEDFPSV
LLETAASLPSLSPLSAA SFKEHEYLGNLSTVLPTEGTLQENVSEASKEVSEKAKTLL
IDRDLTEFSELEYSEMGSFSVSPKAESA VIVANPREEIVKNKDEEEKLVSNILHN
QQELPTALTKLVKEDEVVSSEKAKDSFNEKRVA VEAPMREEYADFKPFERVWEV
KDSKEDSDMLAAGGKIESNLESKVDDKKCFADSLEQTNHEKDSSESNDDTSFPSTPE
15 GIKDRSGAYITCAPFNPAATESIATNIFLLGDPTSENKTDEKKIEEKK AQIVTEKNT
STKTSNPFLVAAQDSETDYVTTDNLT KVTEEVVANMPEGLTPDLVQEACESELNE
VTGTKIA YETKMDLVQTSEVMQESLYPAAQLCPSFEESEATPSPVLPDIVMEAPLN
SAVPSAGASVIQPS SSPLEASSVNYESIKHEPENPPP YEEAMS VSLKKVSGIKEEIKE
PENINAALQETEAPYISIACDLIKETKLSAEPAPDFSDYSEMAKVEQPVPDHSELVE
20 DSSPDSEPVDLFSDD SIPDVPQKQDETVM LVKESLTETSFESMIEYENKEKLSALPP
EGGKPYLESFKLSLDNTKDTLLPDEVSTLSKKEKIPLQMEELSTA VYSNDDLFIKE
AQIRETETFS DSSPIEIDEFPTLISSKTDSFSKLAREYTDLEVSHKSEIANAPDGAGSL
PCTELPHDLSLKNIQPKVEEKISFSDDFSKNGSATSKVLLLPPDV SALATQAEIESIV
KPKVLVKEAEKKLPSDTEKEDRSPSAIFSAELSKTSVVDLLYWRDIKKTGVVFGAS
25 LFLLLSLTVFSIVSVTA YIALALLSVTISFRIYKGVIAIQKSDEGHPFRAYLESEVAI
SEELVQKYSNSALGHVNCTIKELRRLFLVDDLVD SLKFAVLMWVFTYVGALFNGL
TLLILALISLFSVPVIYERHQAQIDHYLGLANKNVKDAMAKIQAKIPGLKRKAE

SEQ ID No:78 (PDGFRB)

30 MRLPGAMPALALKGELLLL SLLLLLEPQISQGLVVTTPGP ELVLNV SSTFVLTCSGS
APVVWERMSQEPPQEMAKAQDGTFFSVLTLTNLTGLDTGEYFCTHNSRGLETDE
RKRLYIFVPDPTVGFLPNDAEELFIFLTEITEITPCRVTDPQLVVTLHEKKGDVALP

VPYDHQRGFSGIFEDRSYICKTTIGDREVDSDAYYVYRLQVSSINVSVNAVQTVVR
QGENITLMCIVIGNEVVNFEWTYPRKESGRLVEPVTDFLLDMPYHIRSILHPSAELE
DSGTYTCNVTESVNDHQDEKAINITVVESGYVRLLGEVGTQLQFAELHRSRTLQVV
FEAYPPPTVLWFKDNRTLGDSSAGEIALSTRNVSETRYVSELTLVRVKVAEAGHYT
5 MRAFHEDAENVQLSFQLQINVPVRVLELSESHPDSGEQTVRCRGRGMPQPNIWSAC
RDLKRCPRELPPTLLGNSSEEEESQLETNVTYWEEEQEFVVSTLRLQHVDRLSVR
CTLRNAVGOQTQEVIVVPHSLPFKVVISAILALVVLTIISLILIMLWQKKPRYEIR
WKVIESVSSDGHEYTYVDPMQLPYDSTWELPRDQLVLGRTLGSAGFGQVVEATAH
GLSHSQATMKVAVKMLKSTARSSSEKQALMSELKIMSHLGPLNVNLLGACTKG
10 GPIYITEYCRYGDLVDYLHRNKHTFLQHHSKRRPPSAELYSNALPVGPLPSHVS
LTGESDGGYMDMSKDESVDYVPMMLDMKGDVKYADIESSNYMAPYDNYVPSAPE
RTCRATLINESPVLSYMDLVGFSYQVANGMEFLASKNCVHRDLAARNVLICEGKL
VKICDFGLARDIMRDSNYISKGSTFLPLKWMAPESIFNSLYTTLSDVWSFGILLWEI
FTLGGTPYPELPMNEQFYNAIKRGYRMAQPAHASDEIYEIMQKCWEEKFEIRPPFS
15 QLVLLERLLGEGYKKKYQQVDEEFLRSDHPAILRSQARLPGFHGLRSPLDTSSVL
YTAVQPNEGDNDYIPLDPKPEVADEGPLGSPSLASSTLNEVNTSSTISCDSPLEP
QDEPEPEPQLELQVEPEPELEQLPDSGCPAPRAEAEDSFL

SEQ ID No:79 (ENSG00000144840)

20 MASLDRVKVLVLGDGSGVGKSSLVHLLCQNQVLGNPSWTVGCSVDVRVHDYKEG
TPEEKTCTYELWDVGGSVGSASSVKSTRAVFYNSVNGIIFVHDLTNKKSSQNLRRW
SLEALNRDLVPTGVLVTNGDYDQEQFADNQIPLLVIGTKLDQIHETKRHEVLTSTA
FLAEDFNPEEINLDCTNPRYLAAGSSNAVKLSRFFDKVIEKRYFLREGNQIPGFPDR
KRFGAGTLKSLHYD

25

SEQ ID No:80 (PTK7)

MGAARGSPARPRRLPLLSVLLLPLLGGTQTAIVFIKQPSSQDALQGRRALLRCEVE
APGPVHVYWLWDGAPVQDTERRFAQGSSLSFAAVDPLQDSGTFQCVARDDVTGE
EARSANASFNIKWIEAGPVVLKHPASEAEIQPQTQVKLRCHIDGHPRPTYQWFRDG
30 TPLSDGQSNHTVSSKERNLTLRPAGPEHSGLYSCCAHSAFSQACSSQNFTLSIADES
FARVVLAPQDVVVARYEEMFHCQFSAQPPPSLQWLFEDETPITNRSRPPHLRRAT
VFANGSLLLQVRPRNAGIYRCIGQGQRGPPILEATLHLAEIEDMPLFEPRVFTAGS

EERVTCCLPPKGLPEPSVWWEHAGVRLPTHGRVYQKGHELVLANIAESDAGVYTC
HAANLAGQRRQDVNITVATVPSWLKKPQDSQLEEGKPGYLDCLTQATPKPTVVW
YRNQMLISED SRFEVFKNGTLRINSVEVYDGTWYRCMSSTPAGSIEAQAVLQVLE
KLKFTPPPQPQQCMGFDKEATVPCSATGREKPTIKWERADGSSLPEWVTDNAGTL
5 HFARVTRDDAGNYTCLASNGPQGQIRAHVQLTVAVFITFKVEPERTTVYQGHTAL
LQCEAQGDPKPLIQWKGKDRILDPTKLGPRLMHIFQNGSLVIHDVAPEDSGRYTCIA
GNSCNIKHTEAPLYVVDKPVPEESEGGSPPPYKMIQTIGLSVGAAYIIVLGLM
FYCKKRCKAKRLQKQPEGEPEMECLNGGPLQNGQPSAEIQEEVALTSLGSGPAA
TNKRHSTSDKMHFPRSSLQPITTLGKSEFGEVFLAKAQGLEEGVAETLVLVKSLQS
10 KDEQQQLDFRRELEMFGKLNHANVVRLLGLCREAEPHYMVLEYVDLEDLKQFLR
ISKSKDEKLKSQPLSTKQKVALCTQVALGMEHLSNNRFVHKDLAARNCLVSAQR
QVKVSALGLSKDVYNSEYYHFRQAWVALRWMSPEAILEGDFSTKSDVWASGVL
MWEVFTHGEMPHGGQADDEV LADLQAGKARLPQPEGCP SKLYRLMQRCWALSP
KDRPSFSEIASALGDSTVDSKP

15

SEQ ID No:81 (FLJ13977)

MRRLTRRLVLPVFGVLWITVLLFFWVTKRKLEVPTGPEVQTPKPSDADWDDLWD
QFDERRYLN AKKWRVGDDPYKLYAFNQRESERISSNRAIPDTRHLSVLNRTPTHLI
REILVDDFSNDPDDCKQLIKLPVKCLRNNERQGLVRSRIRGADIAQGTTLTFLDS
20 HCEVN RDWLQPLLHRVKEDYTRVVC PVIDIINLDTFTYIESASELRGGFDWSLHFQ
WEQLSPEQKARRLDPT EPIRTPHAGGLFVIDKAWFDYLGKYDMDMDIWGGENFEI
SFRVWMCGGSLEIVPCSRVGHVFRKKHPYVFPDGNANTYIKNTKRTAEVWMDEY
KRYYYAARPFALERPF GNVESRLDLRKNLRCQSFKWYLENTYPELSIPKESSIQKGN
IRQRQKCLESQANGTTGSSGQRPAGGTSEIWVQKPRVRNRRHAAPQGFDPGAKPS
25 QHWRRPEHPAAE

SEQ ID No:82 (FLJ20481)

MFFSMGFIVAVKKGKIASPLEAPVFVAAPHSTFFDGLACVVAGLPSMVSRNENAQVP
LIGRLLRAVQPVLVSRVDPDSRKNTINEIKRTTSGGEWPQILVFPEGTCTNRSLIT
30 FKPGAFIPGVPVQPVLRLYPNKLDTVTWQGYTFIQLCMLTFCQLFTKVEVEFM
PVQVPNDEEKNDPVL FANKVRNLMAEALGIPVTDHTYEDCRLMISAGQLTLPMEA
GLVEFTKISRKLKLDWDGVRKHLDEYASIASSSKGGRIIEEFAKYLKLPVSDVLR

QLFALFDRNHDGSIDFREYVIGLAVLCNPSNTEEHQVAFKLFDVDEDGYTTEEEFST
ILQASLGVPDLDVDGLFKEIAQGDSISYEELFKSFALKHPEYAKIFTTYLDLQTCNVFS
LPKEVQTTTPSTASNKVSPEKHEESTSDKKDD

5 SEQ ID No:83 (SERPINA1)

MPSSVSWGILLLAGLCCCLVPVSLAEDPQGDAQAQKTDTSHTDQDHPTFNKITPNLA
EFAFSLYRQLAHQSNSTNIFFSPVSIATAFAMLSLGTKADTHDEILEGLNFNLTETPE
AQIHEGFQELLRTLNPQDSQLQLTTGNGLFLSEGLKLVDFLEDVKKLYHSEAFV
NFGDTEEAQKQINDYVEKGTQGGKIVDLVKELDRDTVFALVNYIFFKGKWERPFEV
10 KDTEEDDFHVDQVTTVKVPMMKRLGMFNIQHCKKLSSWVLLMKYLGNAITFFL
PDEGKLQHLENELTHDITKFLNEDRRSASLHLPKLSITGTYYDLKSVLGQLGITKV
FSNGADLSGVTEEAPLKLSKAVHKA VLTIDEKGTEAAGAMFLEAIPMSIPPEVKFN
KPFVFLMIEQNTKSPLFMGKVVNPTQK

15 SEQ ID No:84 (FLJ22390)

MRPRRPHQIADLFRPKDQIAYSSTSPFLILSEASLADLNSRLEKKVKATNFRPNIVIS
GCDVYAEDSWDELLIGDVELKRVMACSRCILTTVDPDTGVMSRKEPLETLKSYRQ
CDPSEKLYGKSPLFGQYFVLENPGTIKVGDPVYLLGQ

20 SEQ ID No:85 (SIM TO Y71H10A. 2.P.)

MVSIPEYYEGKNVLLTGATGFLGKVLLEKLLRSCPKVNSVYVLRQKAGQTPQER
VEEVLSGKLFDRLRDENPDFREKIIAINSELTQPKLALSEEDKEVIIDSTNIIFHCAAT
VRFNENLRDAVQLNVIATRQLILLAQQMKNLVFMHVSTAYAYCNRKHIDEVVY
PPPVDPKKLIDSLEWMDDGLVNDITPKLIGDRPNTYITKALAEYVVQQEGAKLN
25 VAIVRPSIVGASWKEPFGWIDNFNGPSGLFIAAGKGILRTIRASNNALADLVPVDV
VVNMSLAAAWYSGVNRPRNIMVYNCTTGSTNPFHWGEVEYHVISTFKRNPLEQA
FRPNVNLTSNHLLYHYWIAVSHKAPAFLYDIYLRMTGRSPRCPSFKFNSNSLSHH
YRKGVSHRVSALLLDCTHVDRSETATFNIDVRQLHWAIEYIENYCLGTTKKYVLNEE
MSGLPAARKHLNKTFLSLFHTALCHGKLTFFVDDTFGFPCLLASGGPLLSVSLHFS
30 YVYSQIHLAFILRDLGSHSAPSLASLAGPRELTVGSLLDREWRQIKTDDFELGKSAG
EVDLEGADIEGCLLATSPAVRQQALLQRGVQWYISIPTTQETVAMEMQI

SEQ ID No:86 (Hypothetical protein tyrosine phosphatase ensg00000149185)

MAATALLEAGLARVLFYPTLLYTLFRGKVPGRAHRDWYHRIDPTVLLGALPLRSL
TRQLVQDENVRGVITMNEEYETRFLCNSSQEWKRLGVEQLRLSTVDMTGIPITLDN
LQKGVQFALKYQSLGQCVYVHCKAGRSRSATMVAAyliQVHKWSPEEAVRAIAK
5 IRSYIHRPGQLDVLKEFHKQITARATKDGTFVISK

SEQ ID No:87 (ICAM-2)

MSSFGYRTLTVLFTLICCPGSDEKVFEVHVRPKKLAVEPKGSLEVNCSTTCNQPE
VGGLETSLNKILLDEQAQWKHYLVSNISHDTVLQCHFTCSGKQESMNSNVSVYQP
10 PRQVILTLQPTLVAVGKSFTIECRVPTVEPLDSLTLFLFRGNETLHYETFGKAAPAP
QEATATFNSTADREDGHRNFSCLA VLDLMSRGGNIFHKHSAPKMLEIYEPVSDSQ
MVIIVTVVSVLLSLFVTSVLLCFIFGQHLRQQRMGTYGVRAAWRRLPQAFRP

SEQ ID No:88 (KIAA1181)

15 ASGEWRVSGGRPAGAGRPEEALAAGSDPRGAAARLACSAPTPGGGTMPFDFFRRF
DIYRKVPKDLTQPTYTGAIISICCLFILFLFLSELTGFITTEVVNELYVDDPKDSSG
KIDVSLNISLPNLHCELVGLDIQDEMGRHEVGHIDNSMKIPLNNGAGCRFEGQFSIN
KVPGNFHVSTHSATAQPQNPDMTTHVIHKL SFGDTLQVQNIHGAFNALGGADRLTS
NPLASHDYILKIVPTVYEDKSGKQRYSYQYTVANKEYVAYSHTGRIIPAIWFRYDL
20 SPITVKYTERRQPLYRFITTICAIIGGTFTVAGILDSCIFTASEAWKKIQLGKMH

SEQ ID No:89 (KIAA1533)

NSKKMQSWYSMLSPTYKQRNEDFRKLFSKLPEAERLIVDYSCALQREILLQGRLY
LSENWICFYSNIFRWETTISIQLEVTCLKKEKTAKLIPNAIQICTESEKHFFTSFGAR
25 DRCFLILFRLWQNALLEKTLSPRELWHLVHQCYGSELGLTSEDEDYVSPLQLNGL
GTPKEVGDVIALSDITSSGAADRSQEPSVGSRRGHVTPNLSRASSDADHGAEEDK
EEQVDSQPDASSSQTVTPVAEPPSTEPTQPDGPTTLGPLDLLPSEELLTDTSNSSSST
GEEADLAALLPDLSGRLLINSVFHVGAERLQQMLFSDSPFLQGFLLQCKFTDVTLS
PWGDSKCHQRRVLTYTIPISNPLGPKSASVVETQTLFRRGPQAGGCVDSEVLQ
30 GIPYQDYFYTAHRYCILGLARNKARLRVSSEIRYRKQPWSLVKSLIEKNSWSGIED
YFHHLERELAKAEKLSLEEGGKDARGLLSGLRRRKRP LSWRAHGDGPQHDPDPDPC
ARAGIHTSGSLSSRFSEPSVDQGPAGIPSALVLISIVSLILIALNVLLFYRLWSLERT

AHTFESWHSALAKGKFPQTATEWAEILALQKQFHSVEVHKWRQILRASVELLDE
MKFSLEKLHQGITVSDPPFDTQPRPDDSFS

SEQ ID No:90 (kinectin 1 (kinesin receptor))

5 MEFYESAYFIVLIPSIVITVIFLFFWLFMKETLYDEV LAKQKREQKLIPTKTDKKKAE
KKKNKKKEIQNGNLHESDSES VPRDFKLS DALAVEDDQVAPVPLNVVETSSSVRE
RKKKEKKQKPVLEE QVIKESDASKIPGKKVEPVVTKQPTPPSEAAASKKKPGQK
KSKNGSDDQDKKVETLMVPSKRQEALPLHQETKQESGSGKKASSKKQKTENVFV
DEPLIHATTYIPLMDNADSSPVVDKREVIDLLKPDQVEGIQKSGTKKLKTETDKEN
10 AEVKFKDFLLSLKTMMFSEDEALCVVDLLKEKSGVIQDALKKSSKGELTTLIHQLQ
EKDKLLAAVKEDAAATKDRCKQLTQEMMTEKERSNVVMTRMKDRIGTLEKEHN
VFQNKIHVS YQETQQMQMKFQQVREQMEAEIAHLKQENGILRDAVSNTTNQLES
KQSAELNKL RQDYARLVNELTEKTGKLQQEEVQKKNAEQAATQLKVQLQEAERR
WEEVQSYIRKRTAEHEAAQQDLQSKFVAKENEVQSLHSLTDTLVSKQQLEQRL
15 MQLMESEQKRVNKEESLQMQVQDILEQNEALKAQIQQFHSQIAAQTASVLAEEEL
HKVIAEKDKQIKQTEDSLASERDRLTSKEEELKDIQNMNFLKAEVQKLQALANE
QAAAAHELEKMQQS VYVKDDKIRLLEEQLQHEISNKMEEFKILNDQNKALKSEVQ
KLQTLVSEQPNKD VVEQMEKCIQEKDEKLKTVEELLE TGLIQVATKEEELNAIRTE
NSSLTKEVQDLKAKQNDQVSFASLVEELKKVIHEKDGKIKSVEELLEAELLKVAN
20 KEKTVQDLKQEI KALKEEIGNVQLEKAQQLSITSKVQELQNLLKGKEEQMNTMKA
VLEEKEKDLANTGKWLQDLQEENESLKAHVQEV AQHNLKEASSASQFEELEIVLK
EKGNELKRLEAMLKERESDLSSKTQLLQDVQDENKLFKSQIEQLKQQNYQQASSF
PPHEELLKVISEREKEISGLWNELDSLKDAVEHQ RKKNNDLREKNWEAMEALAST
EKMLQDKVNKTSKERQQQVEAVELEAKEVLKCLFPKVSVP SNLSYGEWLHGFEK
25 KAKECMAGTSGSEEVKVLEHKLKEADEMHTLLQLECEKYKSVLAETEGILQKLQ
RSVEQEENKWKVKVDESHKTIKMQSSFTSSEQELERLRSENKD IENLRREHLE
MELEKAEMERSTYVTEVRELKDLLTELQKKLDDSYSEAVRQNEELNLLKAQLNET
LTKLRTEQNERQKVAGDLHKAQQSLELIQSKIVKAAGD TTVIENSDVSPETESSEK
ETMSVSLNQTVTQLQQLLQAVNQQLTKEKEHYQVLE

30

SEQ ID No:91 (Mesenchymal stem cell protein DSCD75)

MLGLLVALLALGLAVFALLDVWYLVRLPCAVLRARLLQPRVRDLLAEQRFPGRV
LPSDLDLLLHMNNARYLREADFARVAHLTRCGVLGALRELRAHTVLAASCARHR
RSLRLLEPFVEVRTRLLGWDDRAFYLEARFVSLRDGFVCALLRFRQHLLGTSPERVV
QHLCQRRVEPPELPADLQHWISYNEASSQLLRMESGLSDVTKDQ

5

SEQ ID No:92 (Neurotrypsin)

MTLARFVLALMLGALPEVVGFDSVLNDSLHSHRHSPAGPHYPPYLPTQQRPT
TRPPPPLPRFPRPPRALPAQRPHALQAGHTPRPHPWGPCPAGEPWVSVTDFGAPCLR
WAEVPPFLERSPPASWAQLRGQRHNFCSRSPDGAGRPWCFYGDARGKVDWGYCD
10 CRHGSVRLRGGKNEFEGTVEVYASGVWGTVCSSHWDDSDASVICHQLQLGGKGI
AKQTPFSGGLIPIYWSNVRCRGDEENILLCEKDIWQGGVCPQKMAAAVTCFSH
GPTFPPIRLAGGSSVHEGRVELYHAGQWGTVCDDQWDDADAEVICRQLGLSGIAK
AWHQAYFGEGSGPVMLEVRCTGNELSIEQCPKSSWGEHNCGHKEDAGVSCTPL
TDGVIRLAGGKGSHEGRLEVYYRGQWGTVCDDGWTELNTYVVCRLGFKYGKQ
15 ASANHFEESTGPIWLDDVSCSGKETRFLQCSRRQWGRHDCSHREDVSIACYPGGE
GHRLSLGFPVRLMDGENKKEGRVEVFINGQWGTICDDGWTDKDAAVICRQLGYK
GPARARTMAYFGEGKGPIHVDNVKCTGNERSLADCIKQDIGRHNCRHSEDAGVIC
DYFGKKASGNSNKESSLSSVCGLRLLHRRQKRIIGGKNSLRGGWPWQVSLRLKSSH
GDGRLLCGATLLSSCWVLTAAHCFKRYGNSTRSYAVRVGDYHTLVPEEFEEEEIGV
20 QQIVIHREYRPDRSDYDIALVRLQGPEEQCARFSSHVLPACLPLWRERPQKTASNC
YITGWGDTGRAYSRTLQQAAPLLPKRFCEERYKGRFTGRMLCAGNLHEHKRVDS
CQGDSGGPLMCERPGESWVVYGVTSWGYGCGVKDSPGVYTKVSAFVPWIKSVT
KL

25 SEQ ID No:93 (PP1, regulatory subunit 15B)

MEPGTGGSRKRLGPRAGFRFWPPFFPRRSQAGSSKFPTPLGPENSGNPTLLSSAQPE
TRVSYWTKLLSQLLAPLPGLLQKVLIWSQLFGGMFPTRWLDFAGVYSALRALKGR
EKPAAPTAQKSLSSLQLDSSDPSVTSPLDWLEEGIHWQYSPPDLKLELKAKGSALD
PAAQAFILLEQQLWGVELLPSSLQSRLYSNRELGSSPSGPLNIQRIDDFSVSYYLLNP
30 SYLDCFPRLVSYQNSDGNSEVVGFQTLTPESSCLREDHCHPQPLSAELIPASWQG
CPPLSTEGLP EIHHLRMKRLEFLQQASKGQDLPTPDQDNGYHSLEEEHSLLRMDPK
HCRDNPTQFVPAAGDIPGNTQESTEEKIELLTTEVPLALEEESPSEGCPSPSEIPMEKE

PGEGRISVVDYSYLEGDLPIARPACSNKLIDYILGGASSDLETSSDPEGEDWDEEA
EDDGFDSDSSLSDSLEQDPEGLHLWNSFCSVDPYNPQNFTATIQTAAARIVPEEPSD
SEKDLSGKSDLENSSQSGSLPETPEHSSGEEDDWESSADEAESLKLWNSFCNSDDP
YNPLNFKAPFQTSGENEKGCRDSKTPSEIVAISECHTLLSCKVQLLGSQESECPDS
5 VQRDVLSGGRHHTHVKKRKVTFL EEVTEYYISGDEDRKGPWEEFARDGCRFQKRIQ
ETEDAIGYCLTFEHRERMFNRLQGTCTFKGLNVLKQC

SEQ ID No:94 (Protein amplified in osteosarcoma (OS-9))

MAAETLLSLLGLLLLGLLLPA SLTGGVGS LNLEELSEMRYGIEILPLPVMGGQSQS
10 SDVVIVSSSKYKQRYECRLPAGAIHFQREREEETPAYQGP GIPPELLSPMRDAPCLLKT
KDWWTYEFCYGRHIQQYH MEDSEIKGEVLYLGYYS AFDWDD ETAKASKQHRL
KRYHSQTYGNGSKCDLNGRPREAEVRFLCDEGAGISGDYIDRVDEPLSCSYVLTIR
TPRLCPHPLL RPPPSAAPQAILCHPSLQPEEYMA YVQRQADSKQYGDKIIEELQDLG
PQVWSETKSGVAPQKMAGASPTKDDSKDSDFWKMLNEPEDQAPGGEEVPAEEQ
15 DPSPEAADSASGAPNDFQNNVQVKVIRSPADLIRFIEELKGGTKK GKPNIGQE QPV
DDAAEVPQREPEKERGDPERQREMEEEEEDEDEDEDEDERQLLGEFEKELEGILL
PSDRDRLRSEVKAGMEREL ENIIQETEKELDPDGLKKESERDRAMLALTSTLNKLI
KRLEEKQSP ELVKKHKKKR VVPKKPPSPQPT EEDPEHRVRVRVT KLRLGGPNQD
LTVLEMKREN PQLKQIEGLVKELLER EGLTAAGKIEIKIVRPWAEGTEEGARWLTD
20 EDTRNLKEIFFN ILVPGAE EAQKERQRQKELES NYRRVWGSPGGEGTGD LDEFDF

SEQ ID No:95 (Protein similar to stromal cell-derived factor 2)

MAVVPLLLLGLLWSAVGASSLG VVTCGSVVKLLNTRHNVRLHSHDVRYGSGSGQ
QSVTGVT SVDDSN SYWRIRGKSATVCERGTP IKCGQPIRLTHVNTGRNLHSHHFTS
25 PLSGNQEVS AFGEEGEGDY LDDWTVLCNGPYWVRDGEVRFKHSSTEVL LSVTGE
QYGRPISGQKEVHGMAQPSQNNYWKAMEGIFMKPSELLKAEAHHAEL

SEQ ID No:96 (Protocadherin beta 8)

MEASGKLICRQRQVLFSFLLLGLSLAGAAEPRSYSVVEETEGSSFVTNLAKDLGLE
30 QREFSRRGVRVVS RGNKLHLQLNQETADLLLNEKLDREDLCGHTEPCVLR FQVLL
ESPFEFFQAE LQVIDINDHSPVFLDKQMLVKVSESSPPGTAFPLKNAEDLDIGQNNI
ENYIISPNSYFRVLTRKRS DGRKYPELVLDNALDREEEAELRLTLTALDGGSPPRSG

TAQVYIEVVDVNDNAPEFQQPFYRVQISEDSPISFLVVKVSATDVD TG VNGEISYSL
FQASDEISKTFKVDFLTGEIRLKKQLDFEKFQSYEVNIEARDAGGFSGKCTVLIQVI
DVNDHAPEVTMSAFTSPIPENAPETVVALFSVSDLDSENGKISCSIQEDLPFLLKSS
VGNFYTLTETPLDRESRAEYNVTITVTDLGTPRLTTHLNMTVLVSDVNDNAPAF
5 QTSYTLFVRENNSPALHIGSVSATDRDSGTNAQVTYSLLPPQDPHLPLASLVSINTD
NGHLFALRSLDYEALQAFEFRVGASDRGSPALSSEALVRVLVLDANDNSPFVLYPL
QNGSAPCTELVPRAAEPGYLVTKVVAVDGDSGQNAWLSYQLLKATEPGLFGVW
AHNGEVRTARLLSERDAAKQRLVVLVKDNGEPPCSATATLHLLLVDGFSQPYLPL
PEAAPAQGQADSLTVYLVVALASVSSLFLFSVLLFVAVLLCRRSRAASVGRCSVPE
10 GPFPGLHLDVRGTGSLSQNYQYEVCLAGGSGTNEFQFLKPVLPNIQGHSGFPEME
QNSNFRNGFGFSLQLK

SEQ ID No:97 (REP8 protein)

MASRGVVGIFFLSAVPLVCLELRRGIPDIGIKDFLLCGRILLALLTLISVTTSWL
15 NSFKSPQVYLKEEEEKNEKRQKLVRKKQQEAQGEKASRYIENVLKPHQEMKLRK
LEERFYQMTGEAWKLSSGHKLGGDEGTSQTSFETSNREAAKSQNLPKPLTEFPSPA
EQPTCKEIPDLPEEPSQTAEVVTVALRCPSGNVLRRLFLKSYSSQVLFDWMTRIG
YHISLYSLSTSFPRLPLAVEGGQSLEDIGITVDTVLILEEKEQTN

20 SEQ ID No:98 (RING finger protein 5)

MAAAEEEDGGPEGPNRERGGAGATFECNICLETAREAVVSVCGHLYCWPC LHQW
LETRPERQECPVCKAGISREKVPLYGRGSQKPQDPRLKTPPRPQGQRPAPESRGG
FQPF GDTGGFHFSFGVGAFPGFFTTVFNAHEPFRRGTGVDLGQGHFPASSWQDSL
FLAIAFFFFWLLSI

25

SEQ ID No:99 (Retinal short-chain dehydrogenase/reductase retSDR2)

MKFLLDILLLLPLLIVCSLESFVKLFIPKRRKSVTGEIVLITGAGHGIGRLTAYEFAKL
KSKLVLDINKHGLEETAACKGLGAKVHTFVVDSCNREDIYSSAKKVKA EIGD
VSILVNNAGVVYTSDLFATQDPQIEKTFEVNVLAHFWTTKAFLPAMTKNNHGHIV
30 TVASAAGHVSVPFLLAYCSSKFAAVGFHKTLTDELAALQITGVKTTCLCPNFVNT
GFIKNPSTSLGPTLEPEEVNRLMHGILTEQKMIFIPSSIAFLTTLERILPERFLAVLK
RKISVKFDAVIGYKMK AQ

SEQ ID No:100 (Stromal cell-derived factor 2-like 1)

MWSAGRGGAAWPVLLGLLLALLVPGGGAAKTGAELVTCGSVLKLLNTHHRVRL
HSHDIKYGSGSGQQSVTGVEASDDANSYWRIRGGSEGGCPCGSPVRCGQAVRLTH
5 VLTGKNLHTHHFPSPLSNNQEVSFAFGEDGEGEDDLDLWTVRCSGQHWEREAAVRL
QHVGTSVFLSVTGEQYGSPIRGQHEVHGMPSANTHNTWKAMEGIFIKPSVEPSAG
HDEL

SEQ ID No:101 (Thioredoxin domain-containing protein)

10 GRWASGEMAPSGSLAVPLAVLVLLLWGAPWTHGRRSNVRVITDENWRELLEGD
WMIEFYAPWCPACQNLQPEWESFAEWGEDLEVNIKVDVTEQPGLSGRFITLPT
IYHCKDGEFRRYQGPRTKKDFINFISDKWKSIPEVSSWFGPGSVLMSSMSALFQLS
MWIRTCHNYFIEDLGLPVWGSYTVFALATLFSGLLLGLCMIFVADCLCPSKRRRPQ
PYPYPSKKLLSESAQPLKKVEEEQEADEEDVSEEEAESKEGTNKDFPQNAIRQSL
15 GPLATDKS

SEQ ID No:102 (Voltage-dependent anion channel 1)

AVPPTYADLGKSARDVFTKGYGFGLIKLDLTKSENGLEFTSSGSANTETTKVTGS
LETKYRWTEYGLTFTEKWNTDNTLGTEITVEDQLARGLKLTFDSSFSPNTGKKNA
20 KIKTGYKREHINLGCDMDFDIAGPSIRGALVLGYEGWLAGYQMNFETAKSRVTQS
NFAVGYKTDEFQLHTNVNDGTEFGGSIYQKVNKKLETAVNLAWTAGNSNTRFGI
AAKYQIDPDACFSAKVNNSSLIGLGYTQTLKPGIKLTLSALLDGKNVNAGGHKLG
LGLEFQA

25 SEQID No:103 (ATP-binding cassette, sub-family A member 3)

MAVLRQLALLLWKNYTLQKRKVLVTVLELFLPLLFPGLIWLRLKIQSENVPNATI
YPGQSIQELPLFFTFPPPGDTWELAYIPSHSDAAKTVTETVRRALVINMRVRGFPSE
KDFEDYIRYDNCSSSVLAAVVFEHPFNHSKEPLPLAVKYHLRFSYTRRNYMWTQT
GSFFLKETEGWHTTSLFPLFPNPGPRELTSPDGGEPPGYIREGFLAVQHAVDRAIME
30 YHADAATRQLFQRLTVTIKRFPYPPIADPFLVAIQYQLPLLLLLSFTYTALTIAVAR
VQEKERRLKEYMRMMGLSSWLHWSAWFLLFFLFLIAASFMTLLFCVKVKNVA
VLSRSDPSLVLAFLLCFAISTISFSFMVSTFFSKANMAAAFGGFLYFFTYIPYFFVAP

RYNWMTLSQKLCSCLLSNVAMAMGAQLIGKFEAKGMGIQWRDLLSPVNVDDDF
CFGQVLGMMLLLDSVLYGLVTWYMEA VFPQGFGVPQPWYFFIMPSYWCGKPRAV
AGKEEEDSDPEKALRNEYFEAEPEDLVAGIKIKHLSKVFRVGNKDRAAVRDLNLN
LYEGQITVLLGHNGAGKTTTSLMLTGLFPPTSGRAYISGYEISQDMVQIRKSLGLCP
5 QHDILFDNLTVAEHLFYAQLKGLSRQKCPEEVKQMLHIIGLEDKWNRSRSLSG
GMRRKLSIGIALIAGSKVLILDEPTSGMDAISRRAIWDLLQRQKSDRTIVLTTHFMD
EADLLGDRIAIMAKGELQCCGSSLFLKQKYGAGYHMTLVKEPHCNPEDISQLVHH
HVPNATLESSAGAELSFIIPRESTHRFEGLFAKLEKKQKELGASFGASITTMEEVFL
RVGKLVDSMDIQAIQLPALQYQHERRASDWA VDSNLCGAMDPSDGIGALIEEER
10 TAVKLNTGLALHCQQFWAMFLKKAAYSWREWKMVAAQVLVPLTCVTLALLAIN
YSSELFDDPMLRLTLGEYGRTVVPFSVPGTSQLGQQLSEHLKDALQAEGQEPREV
LGDLEEFLIFRASVEGGGFNERCLVAASFRDVGERTVVNALFNNQAYHSPATALA
VVDNLLFKLLCGPHASIVVS NFPQPRSA LQA AKDQFNEGRKGFDIALNLLFAMAFL
ASTFSILAVSERAVQAKHVQFVSGVHVASFWSALLWDLISFLPSLLLLLVFKAFD
15 VRAFTRDGHMADTLLLLLLYGWAIPLMYLMNFFFLGAATAYTRLTIFNILSGIATF
LMVTIMRIPAVKLEELSKTLDHVFLVLPNHCLGMAVSSFYENYETRRYCTSSEVA
AHYCKKYNIQYQENFYAWSAPGVGRFVASMAASGCAYLILLFLIETNLLQRLRGIL
CALRRRRTLTELYTRMPVLPEDQDVADERTRILAPSPDSLHTPLIKELSKVYEQR
VPLLAVDRLSLAVQKGECFGLLGFNAGKTTTTFKMLTGEESLTSGDAFVGGHRISS
20 DVGKVRQRIGYCPQFDALLDHMTGREMLVMYARLRGIPERHIGACVENTLRGLLL
EPHANKLVRTYSGGNKRKLSTGIALIGEPAVIFLDEPSTGMDPVARRLLWDTVARA
RESGKAIIITSHSMEECEALCTRLAIMVQGQFKCLGSPQHLKSKFGSGYSLRAKVQS
EGQQEALIEFKAFVDLTFPGSVLEDEHQGMVHYHLPGRDLSWAKVFGILEKAKE
KYGVD DYSVSQISLEQVFLSFAHLQPPTAEGR

25 SEQID No:104 (CAMK4)

MLKVTVPSCSASSCSSVTASAAPGTASLVPDYWIDGSNRDALSDFFEVESELGRGA
TSIVYRCKQKGTQKPYALKVLKKTVDKKIVRTEIGVLLRLSHPNIIKLKEIFETPTEI
SLVLELVTGGELFDRIVEKGYYSERDAADAVKQILEAVAYLHENGIVHRDLKPEN
30 LLYATPAPDAPLKIADFGLSKIVEHQVLMKTVCGTPGYCAPEILRGCAYGPEVDM
WSVGIIITYILLCGFEPFYDERGDQFMFRRILNCEYYFISPPWWDEVSLNAKDLVRKLI
VLDPKKRLTTFQALQHPWVTGKAANFVHMDTAQKKLQEFNARRKLKAAVKAVV

ASSRLGSASSSHGSIQESHKASRDPSPIQDGNEDMKAIPEGEKIQGDGAQAQAAVKGA
QAEMLMKVQALEKVKGADINAEAEAPKMVPKAVEDGIKVADLELEEGLAEEKLKTV
EEAAAPREGQGSSAVGFVPPQQDVILPEY

5 SEQ ID No:105 (KIAA0363)

EPCALTPGPSHLALTFLPSKPGARPQPEGASWDAGPGGAPSAWADPGEGGSPML
LPEGLSSQALSTEAPLPATLEPRIVMGEETCQALLSPRAARTALRDQEGGHASPDPP
PELCSQGDLSVPSPPDPDSFFTPPSTPTKTTYALLPACGPHGDARDSEAELRDELL
DSPPASPSGSYTTADGDSWASSPSCSLSLAPAEGLDFPSGWGLSPQGSMDEREL
10 HPAGTPEPPSSSESSLADSSSSWGQEGHFFDLDFLANDPMPAALLPFQGSILFQVE
AVEVTPLSPEEEEEEA VADPDPGDLAGEGEEDSTSASFLQSLSDLSITEGMDEAFA
FRDDTSAASSSDSDSASYAEADDERLYSGEPHAQATLLQDSVQKTEESGGGAKGL
QAQDGTVSWAVEAAPQTSDRGAYLSQRQELISEVTEEGALGQESTATVTPHTLQ
VAPGLQVEVATRVTPQAGEEETDSTAGQESAAMAMPQPSQEGISEILGQESVTAE
15 KLPTPQEETSLTLCPDSPQNLKEEGGLDLPSGRKPVAAATVPRQAKEDLTLPQDSA
MTPPLPLQDSDLSSAPKPVAAATVVSQQAEEGLTLPQDSVMTPLPLQDTELSSAPK
PVAAATLVVSQQAEEGLTLPQDSAMTPPLPLQDSDLSSAPKPVAAATLVVSQQAEEG
LTLPLQDSAMTPPLPLQDSDLSSAPKPVAAATLVVSQQAEEGLTLPQDSAMTPPLPLQ
DSDLSSAPKPVAAATVVSQQAEEGLTLPQDSAMTPPLPLQDSDLSSAPKPVAAATI
20 VSQQAEEGLTLPQDSAMTPPLPLQDSDLSSAPKPVAAATPVVSQQAEEGLTLPQDSA
MTPPLPLQDSDLSSAPKPVAAATPVVSQQAEEGLTLPQDSAMTAPLPLQDTGPTSGP
EPLAVATPQTLQAEAGCAPGTEPVATMAQQEVGEALGPRPAPEEKNAALPTVPEP
AALDQVQQDDPQPAEAGTPWAAQEDADSTLGMEALSLEPASGAGEEIAEALSR
PGREACLEARAHTGDGAKPDSPQKETLEVENQQEGGLKLLAQEHGPRALGGAR
25 EVPDAPPAACPEVSQARLLSPAREERGLSGKSTPEPTLPSAVATEASLDSCPESSVG
AVSSLDRGCPDAPAPTSAPTSQQPEPVLGLGSVEQPHEVPSVLGTPLLQPPENLAK
GQPSTPVDRPLGPDPSAPGTLAGAALPPEPPAPCLCQDPQEDSVEDEEPPGSLGLP
PPQAGVQPAAAA VSGTTQPLGTGPRVSLSPHSPLLSPKVASMDAKDLALQILPPCQ
VPPSPGPQSPAGPQGLSAPEQQEDEDSEEDSPRALGSGQHSDSHGESSAELDEQDI
30 LAPQTVQCPAQAPAGGSEETIAKAKQSRSEKKARKAMSKLGLRQIQGVTRITIQKS
KNILFVIAKPDVFKSPASDTYVVFGEAKIEDLSQQVHKAAAEEKFKVPSEPSALVPES

APRPRVRLECKEEEEEEEEVEDEAGLELRDIELVMAQANVSRKAVRALRDNHSD
IVNAIMELTM

SEQID No:106 (DCTN1)

5 MMRQAPTARKTTTRPKPTRPASTGVAGASSSLGPSGSASAGELSSSEPSTPAQTP
LAAPIPTPVLTPGAVPPLSPSKEEEGRAQVRDLEEKLETTLRLKRAEDKAKLKE
LEKHKIQLEQVQEWKSKMQEQQADLQRRLEKEARKEAKEALEAKERYMEEMADT
ADAIEMATLDKEMAEERAESLQQEVEALKERVDELTTDLEILKAEIEEKGSDDGAAS
SYQLKQLEEQNARLKDALVRMRDLSSEKQEHVKLQKLMEKKNQELEVVRQQRE
10 RLQEELSQAESTIDELKEQVDAALGAEEMVEMLTDRNLNLEEKVRELRETVGDLE
AMNEMNDELQENARETELELREQLDMAGARVREAQKRVEAAQETVADYQQTIK
KYRQLTAHLQDVNRELTNQQEASVERQQQPPETFDKFKFAETKAHAKAIEMEL
RQMEVAQANRHMSLLTAFMPDSFLRPGGDHDCVLVLLMPRLICKAELIRKQAAQ
EKFELSENCSERPGLRGAAGEQLSFAAGLVYSLSLQATLHRYEHALSQCSVDVY
15 KKVGSLYPEMSAHERSLDFLIELLHKDQLDETNNVEPLTKAIKYYQHLYSIHLAEQ
PEDCTMQLADHIKFTQSALDCMSVEVGRLRAFLQGGQEATDIALLLRDLETSCSDI
RQFCKKIRRRMPGTDAPGIPAALAFGPQVSDTLDCRKHLTWVVAVLQEVA AAA
AQLIAPLAENEGLLVAALEELAFKASEQIYGTPSSSPYECLRQSCNLISTMKNLAT
AMQEGEYDAERPPSKPPPVELRAAALRAETDAEGLGLKLEDRETVIKELKKSLKI
20 KGEELSEANVRLSLEKKLDSAAKDADERIEKVQTRLEETQALLRKKEKEFEETM
DALQADIDQLEAEKAELKQRLNSQSKRTIEGLRGPPPSGIATLVSGIAGEEQQRGAI
PGQAPGSVPGPGLVKDSPLLLQQISAMRLHISQLQHENSILKGAQMKASLASLPPL
HVAKLSHEGPGSELPAGALYRKTSQLETLNQLSTHTHVVDITRTSPAASKPSAQL
MEQVAQLKSLSDTVEKLKDEVLKETVSQRPGATVPTDFATFPSSAFLRAKEEQD
25 DTVYMGKVTFSCAAGFGQRHRLVLTQEQLHQLHSRLIS

SEQ ID No:107 (KIAA1250)

LQLSVKMSVLISQSVINYVEEENIPALKALLEKCKDVDERNECGQTPLMIAAEQGN
LEIVKELIKNGANCNLEDLDNWTALISASKEGHVHIVEELLKCGVNLEHRDMGGW
30 TALMWACYKGRTDVVELLLSHGANPSVTGLYSVYPIIWAAGRGHADIVHLLLQN
GAKVNCSDKYGTTPLVWAARKGHLECVKHELLAMGADVQEGANSMTALIVAV
KGGYTQSVKEILKRNPVNLTDKDGNTALMIASKEGHTEIVQDLLDAGTYVNIPD

RSGDTVLI GAVRGGHVEIVRALLQKYADIDIRGQDNKTALYWAVEKGNATMVRD
ILQCNPDTEICTKDGETPLIKATKMRNIEVVELLDDKGAKVSAVDKKGDTPLHIAIR
GRSRKLAELLRLNPKDGRLLYRPNKAGETPYNIDCSHQKSILTQIFGARHLSPTETD
GDM LGYDLYSSALADILSEPTMQPPICVGLYAQWGS GKSFL LKKLEDEMKTFA GQ
5 QIEPLFQFSWLIVFLTLLLCGGLGLLFAFTVHPNLGIAVSLSFLALLYIFFIVTYFGGR
REGESWNWAWVLSTRLARHIGYLELL LKLMFVNPPELPEQTTKALPVRFLFTDYN
RLSSVGGETSLAEMIA TLSDACEREFGLATRLFRVFKTEDTQGGKKKWKKTCCCLPS
FVIFLFIIGCIISGITLLAIFRVDPKHLTVNAVLSIASVVGLAFVLNCR TWWQVLD SL
LNSQRKRLHNAASKLHKLKSEGFMKVLKCEVELMARMAKTIDSFTQNQTRLV VII
10 DGLDACEQDKVLQMLDTVRVLFSGKPFIAIFASDPHIIKAINQNLNSVLRDSNING
HDYMRNIVHLPVFLNSRGLSNARKFLVTSATNGDVPCSDTTGIQEDADRRVSQNS
LGEMTKLGSKTALNRRDTYRRRQMQR TITRQMSFDLTKLLVTEDWFS DISPQTMR
RLLNIVSVTGRLLRANQISFNWDR LASWINLTEQWPYRTSWLILYLEETEGIPDQM
TLKTTYERISKNIPTTKDVEPLLEIDGDIRNFEVFLSSRTPVLVARDVKVFLPCTVNL
15 DPKLREIADVRAAREQISIGGLAYPPLPLHEGPPRAPSGYSQPPSVCSSTS FN GPFA
GGVVSPQPHSSYYSGMTGPQH PFYNRPFFAPYLYTPRYYPGGSQH LISRPSVK TSL
PRDQNNGLEVIKEDAAEGLSSPTDSSRGSGPAPGPVLLNSLNVDAVCEKLKQIEG
LDQSM LPQYCTTIKKANINGRVLAQCNIDELKKEMNMNFGDWHLFRSTVLEMRN
AESHVVPEDPRFLSESSSGPAPHGEPARRASHNELPHTELSSQTPYTLNFSFEELNTL
20 GLDEGAPRHSNLSWQSQTRRTPSLSSLNSQDSSIEISKLT DKVQAEYRDAYREYIAQ
MSQLEGGPGSTTISGRSSPHSTYYMGQSSSGGSIHSNLEQEKGKDSEPKPDDGRKSF
LMKRGDVIDYSSSGVSTNDASPLDPITEEDEKSDQSGSKLLPGKKSSERSSSLFQTDL
KLKGSGLRYQKLPSDEDESGTEESDNTPLLKDDKDRKAEGKVERVPKSPEHSAEPI
RTFIKAKEYLSDALLDKKDSSDSGVRSSSESSPNHSLHNEVADDSQLEKANLIELED
25 DSHSGKRGIPHSLSGLQDPHARM SICS EDDKSPSECSLIASSPEENWPACQKAYNLN
RTPSTVTLNNSAPANRANQNFD EMEGIRETSQVILRPSSSPNPTTIQENENLKSMT H
KRSQRSSYTRL SKDPPELHAAASSESTGFGEERESIL

SEQID No:108 (FACL3)

30 MNNHVSSKPSTMKLKHTINPILLYFIHFLISLYTILTYIPFYFFSES RQEKS NR IKA KP
VNSKPDSAYRSVNSLDGLASVLYPGCDTLDKVFTYAKNKFKNKRL LGTREV LNEE
DEVQPNGKIFKKVILGQYNWLSYEDVFVRAFNFGNGLQMLGQKPKTNIAIFCETR

AEWMIAAQACFMYNFQLVTLYATLGGAIVHALNETEVTNIITSKELLQTKLKDIV
SLVPRLRHITVDGKPPTWSDFPKGIIVHTMAAVEALGAKASMENQPHSKPLPSDIA
VIMYTSGSTGLPKGVMISHSNIIAGITGMAERIPELGEEDVYIGYLPLAHVLELSAEL
VCLSHGCRIGYSSPQTLADQSSKIKKGSKGDTSMKPTLMAAVPEIMDRIYKNVM
5 NKVSEMSSFQRNLFILAYNYKMEQISKGRNTPLCDSFVFRKVRSLLGGNIRLLLCG
GAPLSATTQRFMNICFCCPVGQGYGLTESAGAGTISEVWDYNTGRVGAPLVCCEI
KLKNWEEGGYFNTDKPHPRGEILIGGQSVTMGYKNEAKTKADFSEDENGQRWL
CTGDIGEFEPDGCLKIIDRKKDLVKLQAGEYVSLGKVEAALKNLPLVDNICAYANS
YHSYVIGFVVPNQKELTELARKKGLKGTWEELCNSCEMENEVLKVLSEAAISASL
10 EKFEIPVKIRLSPEPWTPETGLVTD AFKLKRKELKTHYQADIERMYGRK

SEQID No:109 (FACL4)

MKLKLNVLTIILLPVHLLITIYSALIFIPWYFLTNAKKKNAMAKRIKAKPTSDKPGSP
YRSVTHFDSLAVIDIPGADTLDKLFDHAVSKFGKKDSLGTREILSEENEMQPNGKV
15 FKKLILGNYKWMNYLEVNRNVNFGSGLTALGLPKNTIAIFCETRAEWMIAAQ
CFKYNFPLVTLYATLGKEAVVHGLNESEASYLITSVELLESKLKTALLDISCVKHII
YVDNKAINKAEYPEGFEIHSMQSVEELGSNPENLGIPPSRPTPSDMAIVMYTSGSTG
RPKGVMHHSNLIAGMTGQCERIPGLGPKDTYIGYLPLAHVLELTAEISCFTYGCR
IGYSSPLTSLDQSSKIKKGSKGDC TVLKPTLMAAVPEIMDRIYKNVMSKVQEMNYI
20 QKTLFKIGYDYKLEQIKKGYDAPLCNLLL FKKVKALLGGNVRMMLSGGAPLSPQT
HRFMNVCFCCPIGQGYGLTESCGAGTVTEVTDYTTGRVGAPLICCEIKLKD WQEG
GYTINDKPNPRGEIVIGGQNISMGYFKNEEKTAEDYSVDENGQRWFCTGDIGEFHP
DGCLQIIDRKKDLVKLQAGEYVSLGKVEAALKNCPLIDNICAFAKSDQSYVISFVV
PNQKRLTLLAQKGVGTWVDICNNPAMEAEILKEIREAANAMKLERFEIPIKVRL
25 SPEPWTPETGLVTD AFKLKRKELRNHYLKDIERMYGGK

SEQID No:110 (KIAA0095)

MDTEGFGELLQQAELAAETEGISELPHVERN LQEIQQAGERLRSRTLTRTSQETA
DVKASVLLGSRGLDISHISQRLESLSAATTFEPLPVKDTDIQGFLKNEKDNALLSAI
30 EESRKRTFGMAEEYHRESMLVEWEQVKQRILHTLLASGEDALDFTQESEPSYISDV
GPPGRSSLDNIEMAYARQIYTYNEKIVNGHLQPNLVDLCASVAELDDKSISDMWT
MVKQMTDVLLTPATDALKNRSSVEVRMEFVRQALAYLEQSYKNYTLVTVFGNL

HQAQLGGVPGTYQLVRSFLNIKLPAPLPGLQDGEVEGHPVWALIYYCMRCGDLLA
ASQVVNRAQHQLGEFKTWFQEYMNSKDRRLSPATENKLRLHYRRALRNNTDPY
KRAVYCIIGRCDVTDNQSEVADKTEDYLWLKLNQVCFDDDDGTSSPQDRLTLSQFQ
KQLLEDYGESHTVNQQPFLYFQVFLTAQFEAAVAFLFRMERLRCHAVHVALVL
5 FELKLLKSSGQSAQLLSHEPGDPPCLRRLNFVRLMLYTRKFESTDPREALQYFY
FLRDEKDSQGENMFLRCVSELVIESREFDMILGKLENDGSRKPGVIDKFTSDTKPII
NKVASVAENKGLFEEAAKLYDLAKNADKVLELMNKLSPVVPQISAPQSNKERL
KNMALSIAERYRAQGISANKFVDSTFYLLLDLITFFDEYHSGHIDRAFDIERLKLVP
LNQESVEERVAAFRNFSDEIRHNLSEVLLATMNLFTQFKRLKGTSPSSSSRPQRVIE
10 DRDSQLRSQARTLITFAGMIPYRTSGDTNARLVQMEVLMN

SEQID No:111 (KIAA0922)

MLLVLECVLFSVAQGYFRMDSSATQFHIETHENTSGLWSIWYRNHFDRSVVLNDV
FLSKETKHMLKILNFTGPLFLPPGCWNIFSLKLA VKDIAINLFTNVFLTTNIGAIFAIP
15 LQIYSAPTKEGSLGFEVIAHCGMHYFMGKSKAGNPWNWNGSLSLDQSTWNVDSEL
ANKLYERWKKYKNGDVCKRNVLGTTTFAHLKKSKESESFVFFLPRLIAEPGLMLN
FSATALRSRMKYFVVQNPSSWPVSLQLLPLSLYPKPEALVHLLHRWFGTDMQMI
NFTTGEFQLTEACPYLGTHSEESRFGILHLHLQPLEMKRVGVVFTPADYGKVTSLIL
IRNNLTVIDMIGVEGFGARELLKVGGRLPGAGGSLRFKVPESTLMDCRRQLKDSK
20 QILSITKNFKVENIGPLPITVSSLKINGYNCQGYGFEVLDCHQFSLDPNTSRDISIVFT
PDFTSSWVIRDLISLVTAADLEFRFTLNVTLPHHLLPLCADVVPGPSWEESFWRLTV
FFVSLSLLGVILIAFQQAQYILMEFMKTRQRQNASSSSQQNNGPMDVISPHSYKSN
CKNFLDTYGPSDKGRGKNCLPVNTPQSRIQNAAKRSPATYGHSSQKKHKCSVYYS
KHKTSTAAASSTSTTTEEKQTSPLGSSLPAAKEDICTDAMRENWISLRYASGINVNL
25 QKNLTLPKNLLNKEENTLKNTIVFSNPSSECSMKEGIQTCMFPKETDIKTSENTAEP
KERELCPLKTSKKLPENHLPRNSPQYHQPDLPESRKNNNGNNQQVPVKNEVDHCE
NLKKVDTKPSSEKKIHKTSREDMFSEKQDIPFVEQEDPYRKKKLQEKREGLNLQNL
NWSKSRTCRKNKKRGVAPVSRPPEQSDLKLVCSDFERSELSSDINVRSWCIQESTR
EVCKADAEIASSLPAAQREAEGYYQKPEKKCVDFKFCSDSSSDCGSSSGSVRASRG
30 WGSWSSTSSSDGDKKPMVDAQHFLPAGDSVSQNDPSEAPISLNLSHNICNPMTV
NSLPQYAEPSCPSLPAGPTGVEEDKGLYSPGDLWPTPPVCVTSSLNCTLENGVPCVI
QESAPVHNSFIDWSATCEGQFSSAYCPLLENDYNAFPEENMNYANGFPCPADVQT

DFIDHNSQSTWNTPPNMPAAWGHASFSSPPYLTSTRSLSPMSGFLFGSIWAPQSDV
YENCCPINPTTEHSTHMENQAVVCKEYYPGFNPFRA YMNLDIWTTTANRNANFPL
SRDSSYCGNV

5 SEQ ID No:112 (PAS domain containing serine/threonine kinase)

MEDGGLTAFEEDQRCLSQSLPLPVSAEGPAAQTAEPSRSFSSAHRHLSRRNGLSR
LCQSRTALSEDRWSSYCLSSLAAQNICTSKLHCPAAPEHTDPSEPRGSVSCCSLLRG
LSSGWSSPLLPAVPCNPKNKAIFTVDAKTTEILVANDKACGLLGYSSQDLIGQKLTQ
FFLRSDSDVVEALSEEHMEADGHAAVVFQTVVDIISRSGEKIPVSVWMKRMQRER
10 RLCCVVVLEPVERVSTWVAFQSDGTVTSCDSLFAHLHGYSVSGEDVAGQHITDLIPS
VQLPPSGQHHPKNLKIQRSVGRARDGTTFPLSLKLKSQPSSEEATTGEAAPVSGYRA
SVWVFCTISGLITLLPDGTHGINHSFALTFLGYGKTELLGKNITFLIPGFYSYMDLA
YNSSLQLPDLASCLDVGNESGCGERTLDPWQGDPAEGGQDPRINVVLGGHV
PRDEIRKLMESQDIFTGTQTELIAGGQLLSCLSPQAPGVDNVPEGSLPVHGEQALP
15 KDQQITALGREEPVAIESPGQDLLGESRSEPVDVKPFASCEDSEAPVPAEDGGSDA
GMCGLCQKAQLERMGVSGPSGSDLWAGAAVAKPQAKGQLAGGSLLMHCPCYGS
EWGLWWRSDQLAPSPSGMAGLSFGTPTLDEPWLGVENDREELQTCLIKEQLS
LAGALDVPHAELVPTECQAVTAPVSSCDLGGRDLCGGCTGSSSACYALATDLP
LEAVEAQEVDVNSFSWNLKELFFSDQTDQTSSNCSCATSELRETPSSLAVGSDPDV
20 GSLQEQQGSCVLDDRELLLLTGTCVDLGQGRRFRESCVGHDPTEPLEVCLVSSEHY
AASDRESPGHVPSTLDAGPEDTCPSAEEPRNLNVQVTSTPVIVMRGAAGLQREIQEG
AYSGSCHHRDGLRLSIQFEVRRVELQGPTPLFCCWLVKDLLHSQRDSAARTRFLA
SLPGSTHSTA AELTGPSLVEVLRARPWFEPPKA VELEGLAACEGEYSQKYSTMSP
LGSGAFGFVWTA VDKEKNKEVVVKFIKKEKVLEDCWIEDPKLGKVTLEIAILSRV
25 EHANIIVLDIFENQGFFQLVMEKHGSGLDLFAFIDRHPRLEPLASYIFRQLVSAV
GYLRLKDIHRDIKDENVIAEDFTIKLIDFGSAA YLERGKLFYTFCTIEYCAPEVL
MGNPYRGPELEMWSLGVTLYTLVFEENPFCELEETVEAAIHPPYLVSKELM
SLVSG LLQVPERRTTLEKLVTDPWVTQPVNLADYTWEVCRVKNKPESGVL
SAASLEMG NRSLSDVAQAQELCGGPVPGEAPNGQGCLHPGDPRLTS

30

SEQID No:114 (homolog of yeast golgi membrane protein yif1p (yip1p-interacting factor))
HPAGLAAAAAGTPRLPSKRRIIPVSQPGMADPHQLFDDTSSAQSRGYGAQRAPGGL

SYPAASPTPHAAFLADPVSNMAMAYGSSSLAAQGKELVDKNIDRFIPITKLKYYFA
VDTMYVGRKLGLLFFPYLHQDWEVQYQQDTPVAPRFDVNAPDLYIPAMAFITYV
LVAGLALGTQDRFSPDLLGLQASSALAWLTLEVLAILLSLYLVTVNTDLTTIDLVA
FLGYKYVGMIGGVLMGLLFGKIGYYLVLGWCCVAIFVFMIRTLRLKILADAAAEG
5 VPVRGARNQLRMYLTMAVAAAQPMLMYWLT FHLVR

SEQ ID No:114 (Integral membrane transporter protein)

MVNYAWAGRSQRKLWWRSVAVLTCKSVVRPGYRGGLQARRSTLLKTCARARA
TAPGAMKMVAPWTRFYSNSCCLCCHVRTGTILLGVWYLIINAVVLLILLSALADP
10 DQYNFSSSELGGDFEFMDDANMCIAIAISLLMILICAMATYGAYKQRAAWIIPFFC
YQIFDFALNMLVAITVLIYPNSIQEYIRQLPPNFPYRDDVMSVNPTCLVLILLFISIL
TFKGYLISCWNCYRYINGRNSSDVLVYVTSNDTTVLLPPYDDATVNGAAKEPPP
PYVSA

15 SEQID No:115 (GPR49)

MDTSRLGVLLSLPVLLQLATGGSSPRSGVLLRGCPHCHCEPDGRMLLRVDCSDL
GLSELPSNLSVFTSYLDLSMNNISQLLPNPLPSLRFLEELRLAGNALTYIPKGFTGL
YSLKVLMLQNNQLRHVPTEALQNLRLSLQSLRLDANHISYVPPSCFSGLHSLRHLW
LDDNALTEIPVQAFRSLSALQAMTLALNKIHHIPDYAFGNLSSLVVLHLHNNRIHSL
20 GKCCFDGLHSLETLDLNYNNLDEFPTAIRTLNLKELGFHSNNIRSIPEKAFVGNPS
LITIHFYDNPIQFVGRSAFQHLPELRTLTLNGASQITEFPDLTG TANLES LTLTGAQIS
SLPQTVCNQLPNLQVLDLSYNLLEDLPSFSVCQKLQKIDLRHNEIYEIKVDTFQQLL
SLRSLNLAWNKIAIHPNAFSTLPSLIKLDLSSNLLSSFPTGLHGLTHLKL TGNHAL
QSLISSENFPELKVIEMPYAYQCCAFGVCENAYKISNQWNKGDNSSMDDLHKKDA
25 GMFQAQDERDLEDFLD FEEDLKALHSVQCSPSPGPFKPCEHLLDGWLIRIGVWTI
AVLALTCNALVTSTVFRSPLYISPIKLLIGVIAAVNMLTGVSSAVLAGVDAFTFGSF
ARHGAWWENGVGCHVIGFLSIFASESSVFLTLAALERGFSVKYSAKFETKAPFSS
LKVIILLCALLALTMAAVPLLGGSKYGASPLCLPLPFGEPTMGYMAVALLNSLCF
LMMTIAAYTKLYCNLDKGDLENWDCSMVKHIALLLFTNCILNCPVAFLSFSSLINLT
30 FISPEVIKFILLVVVPLPACLNPLLYILFNPHFKEDLVSLRKQTYVWTRSKHPSLMSI
NSDDVEKQSCDSTQALVTFTSSSITYDLPPSSVPSPAYPVTESCHLSSVAFVPCL

SEQ ID No:116 (NAP-1 related protein/NAP-1-like protein)

KEQSELDQDLDDVEEVEEEETGEETKLKARQLTVQMMQNPQILAALQERLDGLV
ETPTGYIESLPRVVKRRVNALKNLQVKCAQIEAKFYEEVHDLERKYAVLYQPLFD
KRFEIINAIYEPTEEEECEWKPDEEDEISEELKEKAKIEDEKKDEEKEDPKGIFEFWLT
5 VFKNVDLLSDMVQEHDEPILKHLKDIKVKFSDAGQPMSFVLEFHFEPNEYFTNEVL
TKTYRMRSEPDDSDPFSFDGPEIMGCTGCQIDWKKGKNVTLKTIKKKQKHKGRGT
VRTVTKTVSNDSFFNFFAPPEVIPKFSAFDDDAEAILAADFEIGHFLRERIIPRSVLYF
TGEAIEDDDDDYDEEGEEADEGYQLFEEVKSCSKLFQRWLQ

10 SEQID No:117 (SPTLC2)

MRPEPGGCCCRRTVRANGCVANGEVRNGYVRSSAAAAAAAAAAGQIIHVTQNGG
LYKRPFNEAFEETPMLVAVLTYVGYGVLTFLGYLRDFLRYWRIEKCHHATEREEQ
KDFVSLYQDFENFYTRNLYMRIRDNWNRPICSVPGARVDIMERQSHDYNWSFKY
TGNIKGVINMGSYNYLGFARNTGSCQEAAAKVLEEYGAGVCSTRQEIGNLDKHE
15 ELEELVARFLGVEAAMAYGMGFATNSMNIPALVGKGCLILSDELNHASLVLGARL
SGATIRIFKHNNMQSLEKLLKDAIVYGQPRTRRPWKKILILVEGIYSMEGSIVRLPE
VIALKKKYKAYLYLDEAHSIGALGPTGRGVVEYFGLDPEDVDVMMGTFTKSFGA
SGGYIGGKKELIDYLRTHSHSAVYATSLSPVVEQITSMKCMGQDGTSLGKECV
QQLAENTRYFRRRLKEMGFIIYGNEDSPVVPLMLYMPAKIGAFGREMLKRNIGVV
20 VVGFPATPIIESRARFCLSAHTKEILD TALKEIDEVGDLLQLKYSRHRLVPLLD RPF
DETTYEETED

SEQID No:118 (Delta-like homolog)

MTATEALLRVLLLLLAFGHSTYGAECFPACNPQNGFCEDDNVCRCQPGWQGPLC
25 DQCVTSPGCLHGLCGEPGQCICTDGWDGELCDRDVRACSSAPCANNGTCVSLDG
GLYECSCAPGYSGKDCQKKDGPCVINGSPCQHGGTCVDDEGRASHASCLCPPGFS
GNFCEIVANSCTPNPCENDGVCTDIGGDFRCRCPAGFIDKTCSRPTVNCASSPCQN
GGTCLQHTQVSYECLCKPEFTGLTCVKKRALSPQQVTRLPSGYGLAYRLTPGVHE
LPVQQPEHRILKVSMKELNKKTPLLTEGQAICFTILGVLTSLVVLGTVGIVFLNKCE
30 TWVSNLRYNHMLRKKKNLLQYNSGEDLAVNIIFPEKIDMTTFSKEAGDEEI

SEQ ID No: 119 (25 kDa microsomal signal peptidase subunit)

MAAAAVQGGRSGGSGGCSGAGGASNCGTGSGRSGLLDKWKIDDKPKIDKWDG
SAVKNSLDDSAKKVLEKYKYVENFGLIDGRLTICTISCFFAIVALIWDYMHFPES
KPVLAALCVISYFVMMGILTIYTSYKEKSIFLVAHRKDPTGMDPDDIWQLSSSLKRF
DDKYTLKLTFISGR TKQQREAEFTKSI AKFFDHSGTLVMDA YEPEISRLHDSLAIER
5 KIK

SEQ ID No: 120 (APP-C99)

MDAEFRHDSGYEVHHQKL VFFAEDVGSNKGAIIGLMVGGVVIATVIVITLVMLKK
KQYTSIHG VVEVDA AVTPEERHLSKMQQNGYENPTYKFFEQMQN

10

SEQ ID No: 121 (Psen-2)

MLTFMASDSEEEVCDERTSLMSAESPTPRSCQEGRQGPEDGENTAQWRSQENEED
GEEDPDRYVCSGVPGRP PGLEEELTKYGA KHVIMLFVPVTL CMIVV VATIKSVRF
YTEKNGQLIYTPFTEDTPSVGQRL LNSVLNTLIMISVIVVM TIFLVVLYKYRCYKFI
15 HGWLIMSSLMLLFLFTYTYLGEVLKTYNVAMDYPTLLLT VWNFGAVGMVCIHWK
GPLVLQQA YLIMISALMALVF IKYLP EWSAWVILGAISVYDLVAVLCPKGPLRML
VETAQERNEPIFPAL IYSSAMVWTVGMAKLD PSSQ GALQLPYDPEMEEDSYDSFG
EPSYPEVFEPPLTGYPGEELEEEERGVKLGLGDFIFYSVLVGKAAATGSGDWNTT
LACFVAILIGLCLTLLLLAVFKKALPALPISITFGLIFYFSTDNLVRPFMDTLASHQL
20 YI

SEQ ID No: 122 (FADS1)

MGTRAARPAG LPCGAENPAR RRLALGARQQ IHSWSPRTPS TRLTAPAGPA
RGVARPAMAP DPVAAETAAQ GTPRYFTWD EVAQRSGCEE RWLVIDRKVY
25 NISEFTRRHP GGSRVISHYA GQDATDPFVA FHINKGLVKK YMNSLLIGEL
SPEQPSLEPT KNKELTDEFR ELRATVERMG LMKANHVF FL LYLLHILLE
GAAWTLWVF GTSFLPFLC AVLLSAVQAA AGWLQHDFGH LSVFSTSKWN
HLLHHFVIGH LKGAPASWWS HMHFQHHAKP NCFRKDPDIN MHPFFFALGK
ILSVELGKQK KKYMPYNHQH KYFFLIGPPA LLPLYFQWYI FYFVIQRKKW
30 VDLAWMITFY VRFFLT YVPL LGLKAFLGLF FIVRFLESNW FVWVTQMNHI
PMHIDHDRNM DWVSTQLQAT CNVHKSAFND WFSGHLNFQI EHHLFPTMPR
HNYHKVAPLV QSLCAKHGIE YQSKPLLSAF ADIHSCLKES GQLWLDAYLH Q

SEQ ID No: 123 (DEGS)

MGSRVSREDF EWVYTDQPHA DRRREILAKY PEIKSLMKPD PNLIWIIIMM
VLTQLGAFYI VKDLDWKWVI FGAYAFGSCI NHSMTLAIHE IAHNAAFGNC
5 KAMWNRWFGM FANLPIGIPY SISFKRYHMD HHRYL GADGV DVDIPTDFEG
WFFCTAFRKF IWVILQPLFY AFRPLFINPK PITYLEVINT VAQVTFDILI
YYFLGIKSLV YMLAASLLGL GLHPISGHFI AEHYMFLKGH ETYSYYGPLN
LLTFNVGYHN EHHDFPNIPG KSLPLVRKIA AEYYDNLPHY NSWIKVLYDF
VMDDTISPYS RMKRHQK GEM VLE

10

SEQ ID No: 124 (SCD4/ HYPOTHETICAL PROTEIN FLJ21032)

MPGPATDAGK IPFCDAKEEI RAGLESSEGG GGP ERPGARG QRQNIVWRNV
VLMSLLHLGA VYSLVLIPKA KPLTLLWAYF CLLLAALGVT AGAHLRWSHR
SYRAKLPLRI FLAVANSMAF QNDIFERSRD HRAHHKYSET DADPHNARRG
15 FFFSHIGWLF VRKHRDVIEK GRKLDVTDLL ADPVVRIQRN TQHIQKEGRA
LNQEAACEML REWHQGHILK VTLPLGLHILA LLHTHCNHSE KCCLMLRALS
VSLEVF

SEQ ID No: 125 (FADS3)

20 MGGVGEPPGR EGPAQPGAPL PTFCWEQIRA HDQPGDKWLV IERRVYDISR
WAQRHPGGSR LIGHHGAEDA TDAFRAFHQD LNFVRKFLQP LLIGELAPEE
PSQDGPLNAQ LVEDFRALHQ AAEDMKLFDA SPTFFAFLLG HILAMEVLAW
LLIYLLGPGW VPSALAAFIL AISQAQSWCL QHDLGHASIF KKSWWNHVAQ
KFVMGQLKGF SAHWWNFRHF QHHAKPNIFH KDPDVTVAPV FLLGESSVEY
25 GKKKRRYLPY NQQHLYFFLI GPPLTLVNF EVENLAYMLV CMQWADLLWA
ASFYARFFLS YLPFYGVPGV LLFFVAVRVL ESHWFVWITQ MNHIPKEIGH
EKHRDWVSSQ LAATCNVEPS LFTNWFSGHL NFQIEHHLFP RMPRHNYSRV
APLVKSLCAK HGLSYEVKPF LTALVDIVRS LKKS GDIWLD AYLHQ

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